

In the Matter Of:
ADVANCELL PTY LTD. v
SCIENCONS AS


Charles Conroy

April 02, 2026



UNITED STATES PATENT AND TRADEMARK OFFICE

BEFORE THE PATENT TRIAL AND APPEAL BOARD

Post Grant Review No.: PGR2025-00029

-----X

ADVANCELL PTY LTD.,

Petitioner,

-against-

SCIENCONS AS,

Patent Owner.

CAPTION CONTINUED

-----X

STENOGRAPHIC DEPOSITION OF:

CHARLES S. CONROY

Thursday, April 2, 2026

New York, New York

8:58 a.m. - 3:45 p.m.

Reported stenographically by:

Richard Germosen, FAPR, CA CSR No. 14391

RDR, CRR, CCR, CRCR, CSR-CA, NYACR, NYRCR

NCRA/NJ/NY/CA Certified Realtime Reporter

NCRA Realtime Systems Administrator

Job No. 2026-1015799

UNITED STATES PATENT AND TRADEMARK OFFICE

BEFORE THE PATENT TRIAL AND APPEAL BOARD

Post Grant Review No.: PGR2025-00040

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ADVANCELL PTY LTD.,

Petitioner,

-against-

SCIENCONS AS,

Patent Owner.

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STENOGRAPHIC DEPOSITION of CHARLES S. CONROY,
taken in the above-entitled matter before RICHARD
GERMOSEN, Fellow of the Academy of Professional
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30XI00184700), Certified Realtime Court Reporter-NJ,
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Realtime Systems Administrator, taken at the offices of
WILSON ELSER MOSKOWITZ EDELMAN & DICKER LLP, 31 West
52nd Street, New York, New York 10019, on Thursday,
April 2, 2026, commencing at 8:58 a.m.

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I N D E X

WITNESS EXAMINATION

CHARLES S. CONROY

BY ATTORNEY NALL 10

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BY ATTORNEY HEINTZ 103

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E X H I B I T S

EXHIBIT NO. DESCRIPTION PAGE

Exhibit 1 letter dated August 28, 2025, 42
from Doug Horton

Exhibit 2 document entitled Team & 52
Investors-Nucleus
RadioPharma, May 23, 2024

Exhibit 3 document entitled CDMO 61
Nucleus RadioPharma links up
with ARTBIO to help produce
prostate cancer candidate for
clinical trials, May 7, 2024

E X H I B I T S (CONT'D.)

EXHIBIT NO.	DESCRIPTION	PAGE
Exhibit 4	document Pages 1 through 5 of an ARTBIO website titled: ARTBIO and Nucleus RadioPharma Announce Collaboration to Manufacture GMP-Grade Therapeutic Products Containing Radioisotope Pb-212 to Support Emerging Clinical Trials	64
Exhibit 1001	document previously marked Exhibit 1001	68
Exhibit 1003	document previously marked Exhibit 1003	83
Exhibit 2002	document previously marked Exhibit 2002	106
Exhibit 5	drawing bearing the markings "ball valve" and "gate valve"	147

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EXHIBIT NO.	DESCRIPTION	PAGE
Exhibit 6	single-page document bearing the legend "Inspired By Your Recent Views"	150
Exhibit 7	photo of a specimen bottle	153
Exhibit 8	multipage document bearing legend "VAT" across the top	166

***original exhibits returned with original transcript by LEXITAS LEGAL to DLA PIPER LLP (US) (exhibit index concluded)

*** (REPORTER'S NOTE: All quotations from exhibits are reflected in the manner in which they were read into the record and do not necessarily denote an exact quote from the document.)

IT IS HEREBY STIPULATED AND AGREED, by
and between the attorneys for the respective parties
herein, that filing and sealing be and the same are
hereby waived.

IT IS FURTHER STIPULATED AND AGREED
that all objections, except as to the form of the
question, shall be preserved to the time of trial.

IT IS FURTHER STIPULATED AND AGREED
that the within deposition may be signed and sworn
to before any officer authorized to administer an
oath, with the same force and effect as if signed
and sworn to before the officer before whom the
within deposition was taken.

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P R O C E E D I N G S

8:58 a.m.

New York, New York

CERTIFIED STENOGRAPHER: On the
stenographic record at 8:55 a.m.

Good morning. My name is Rich
Germosen. I am a Certified Stenographic
Reporter. My license is available for
inspection.

- - -

(Whereupon, the Certified
Stenographic Reporter administered the oath to
the witness.)

- - -

ATTORNEY NALL: So it's -- by agreement
of the parties, this transcript will be for
both PGR2025-00040 and PGR2025-00029.

And we will first do the 29PGR and then
take a break to allow Mr. Conroy's counsel to
do redirect questions, and then we'll go back
to the '437, but it will be one transcript.

ATTORNEY ROSATO: Sure.

1 C H A R L E S S. C O N R O Y,
2 (the witness produced a State of North Carolina
3 driver's license), having been first duly sworn or
4 affirmed, was examined and testified as follows:

5 EXAMINATION BY ATTORNEY NALL:

6 Q. Is that okay with you, Mr. Conroy?

7 A. Absolutely.

8 Q. Great.

9 Would you please state your full
10 name for the record?

11 A. Sure. It's Charles Shields Conroy.

12 Q. And where do you live?

13 A. I live in -- just north of
14 Charlotte, North Carolina, Mooresville, North
15 Carolina.

16 Q. Are you testifying here today as an
17 expert retained by ARTBIO?

18 A. I was originally retained by
19 counsel and then subsequently retained by
20 ARTBIO, so yes.

21 Q. Have you ever been deposed
22 previously?

23 A. Yes.

24 Q. In what context?

1 A. I've been deposed three times.

2 Q. For what?

3 A. The two were business cases from my
4 former employer, and one was as an expert
5 witness for a radiopharmacy delivery case.

6 Q. When you say it was for a
7 radiopharmacy delivery case, was that a patent
8 case?

9 A. No, it was a service contract case.

10 Q. And the two prior times you were
11 deposed for business cases, were those patent
12 cases?

13 A. They were not.

14 Q. Have you ever been deposed as
15 a -- strike that.

16 When you were an expert witness for
17 the radiopharmacy delivery case, in what
18 capacity were you an expert?

19 A. Determining and representing how
20 radioactive doses were delivered from
21 pharmacies to hospitals.

22 Q. What were the other two depositions
23 about?

24 A. Business contract interference.

1 Q. So even though you've been deposed
2 a couple of times before, I just would like to
3 go over the ground rules real quick just to
4 make sure we're on the same page; is that
5 okay?

6 A. Sure.

7 Q. So I'm going to ask some questions
8 and you'll give answers. If you don't
9 understand my questions, would you please ask
10 for a clarification?

11 A. I will.

12 Q. If you don't ask for a
13 clarification, I will assume that you
14 understood the question; is that okay?

15 A. That's fair.

16 Q. You understand that you're under
17 oath and have sworn to tell the truth here?

18 A. I do.

19 Q. If you need a break, that's fine,
20 just let me know, but would it be okay if you
21 answered any question that was pending first?

22 A. Sure.

23 Q. Is there any reason you cannot give
24 truthful and complete answers to my questions

1 today?

2 A. No.

3 Q. Where do you work?

4 A. I work for Radion Advisory Group,
5 which is a sole proprietorship that I own.

6 Q. Does anybody else work for that
7 group?

8 A. Not directly.

9 Q. What do you mean by "not directly"?

10 A. I work with a variety of experts in
11 the field, but they're all 1099 relationships.

12 Q. What is your job title?

13 A. Managing partner.

14 Q. Did you do anything to prepare for
15 this deposition today?

16 A. Yes, I did.

17 Q. What did you do?

18 A. A variety of preparations.

19 Q. Like what?

20 A. I reviewed the materials. Spoke to
21 the attorneys. Re-reviewed the materials.
22 Spoke to the attorneys.

23 Q. Did you speak to anybody other than
24 your attorneys?

1 A. Not in preparation for the case.

2 Q. Did you review the declaration?

3 A. I did.

4 Q. Did any of the documents that you
5 reviewed refresh your recollection?

6 A. Yes.

7 Q. Which ones?

8 A. Both my declarations, the patent
9 claims, and other various articles that I
10 reviewed previously. I can't tell you exactly
11 which ones they were.

12 Q. Did you speak with any ARTBIO
13 employees?

14 A. Their attorney.

15 Q. Who is that?

16 A. Andrew.

17 Q. Did you speak with any Sciencons'
18 employees?

19 A. Not that I'm aware of.

20 Q. Are you being compensated for your
21 work?

22 A. I am.

23 Q. What is that compensation?

24 A. I'm paid on an hourly basis \$750.

1 Q. Is any of your compensation
2 contingent on the outcome of this matter?

3 A. It is not.

4 Q. Do you know if you were subject to
5 a Daubert challenge in that prior case where
6 you were an expert?

7 A. I'm not aware of what that is.

8 Q. What was the outcome of the prior
9 case where you were an expert?

10 A. I do not recall.

11 Q. I'm handing you what has been
12 previously marked -- been marked Exhibit 2003.

13 Do you have it?

14 A. I do.

15 Q. Is this the CV that was submitted
16 with your expert declaration within the '603
17 PGR?

18 A. I believe so.

19 Q. Is this CV identical to the one
20 that was submitted with your declaration in
21 the '437 PGR?

22 A. I do not know.

23 Q. Do you expect that there were any
24 differences between your CV between the two

1 different PGRs?

2 A. I do not know.

3 Q. Did you prepare a different
4 declaration for the second PGR?

5 A. Not that I recall.

6 Q. Do you have any reason to believe
7 that your CVs between the two PGRs are
8 different?

9 A. There was a difference in time, so
10 they may be slightly modified.

11 Q. Is this CV at Exhibit 2003 from the
12 PGR200529PGR [sic] accurate?

13 A. To the best of my knowledge, yes.

14 Q. You have a bachelor's of science in
15 pharmacy from Purdue University; correct?

16 A. That's correct.

17 Q. You completed that in 1992;
18 correct?

19 A. That's correct.

20 Q. What do the letters RPh at the top
21 next to your name mean?

22 A. Registered pharmacist.

23 Q. Are you a registered pharmacist?

24 A. I am.

1 Q. Where?

2 A. In a variety of states. My
3 original license is in Indiana.

4 Q. Are you currently a registered
5 pharmacy -- pharmacist in any state?

6 A. I believe I still retain my license
7 in Indiana.

8 Q. You completed an MBA at the
9 University of Michigan in 1999; correct?

10 A. That's correct.

11 Q. In your CV, next to the MBA it
12 says: Corporate strategy and operations;
13 right?

14 A. That's correct.

15 Q. What does that mean?

16 A. That means that I had an emphasis
17 in corporate strategy and operations while
18 studying for my MBA.

19 Q. Did you take any coursework in
20 radioisotope generators when studying for your
21 MBA?

22 A. No.

23 Q. You do not hold a degree in
24 chemistry, chemical engineering, physics,

1 nuclear chemistry, radiochemistry, or
2 materials science; do you?

3 A. My degree is in pharmacy.

4 Q. So you -- you agree you do not hold
5 a degree in chemistry, in chemical
6 engineering, physics, nuclear chemistry,
7 radiochemistry, or materials science; correct?

8 ATTORNEY ROSATO: Objection to form.

9 A. That's correct.

10 Q. At the top of your CV at
11 Exhibit 2003, it says: Professional summary,
12 radiopharmaceutical CEO and operator.

13 Do you see that?

14 A. I do.

15 Q. What do you mean by
16 "radiopharmaceutical operator"?

17 A. That I've had --

18 ATTORNEY ROSATO: Objection to form.

19 A. That I've had 25 -- well, I've had
20 multiple years of experience at working in the
21 radiopharmaceutical field.

22 Q. Do you have any experience in the
23 scientific research role in the
24 radiopharmaceutical field?

1 A. I'm sorry, can you restate the
2 question?

3 Q. Do you have any experience in the
4 scientific -- in a scientific research role in
5 the radiopharmaceutical field?

6 A. No.

7 Q. Do you have any experience as a
8 designer of a radiopharmaceutical generator?

9 A. I do not.

10 Q. What would you consider a routine
11 task for a person with a bachelor's degree in
12 chemistry, nuclear chemistry, radiochemistry,
13 chemical engineering, physics, or materials
14 science or comparable field of study, plus
15 approximately two or three years of
16 professional experience with radioisotope
17 generators, radiopharmaceutical chemistry, or
18 nuclear medicine?

19 ATTORNEY ROSATO: Objection to form and
20 foundation.

21 A. Well, for myself -- I don't know
22 that I can answer that question, but for
23 myself specifically, I've worked with
24 generators for more than a decade and oversaw

1 multiple different lines of manufacture for
2 generators, as well as research, and was
3 highly aware of generators in the field from
4 the 1990s until today in previous roles that
5 I've had.

6 Q. When you say you've worked with
7 generators for more than a decade, what
8 exactly do you mean?

9 A. We used them in radiopharmaceutical
10 operations on a daily basis.

11 Q. What do you mean "we used them"?

12 A. We received them, eluted them, used
13 the leuate pump, L-E-U-A-T-E, from the
14 generators in our daily operations.

15 Q. What kind of generators?

16 A. Technetium and gallium.

17 Q. Do you have any experience with
18 emanation generators?

19 ATTORNEY ROSATO: Objection to form.

20 A. My experience would be in
21 evaluating those generators against other
22 generators that we may have put into
23 production.

24 Q. I'm handing you what has been

1 previously marked -- been marked Exhibit 2002
2 in PGR200529.

3 You don't have to open that yet.

4 You said you have -- your prior
5 experience would be in evaluating those
6 generators. What kind of evaluation do you
7 mean?

8 A. Well, the evaluation would be -- it
9 would be dependent on the role that I had.

10 Q. Please explain more.

11 A. As a purchaser -- well, originally,
12 I believe as a marketer, someone who is
13 working in marketing generators, we had to
14 know what the different types -- how different
15 generators worked.

16 So specifically, whether they were
17 being used -- for example, in lead, they're
18 either emanation or gas or emanation or matrix
19 types of generators. Had to know the
20 difference between those two types of
21 generators, and the pros and cons of each when
22 we were trying to put something into our
23 radiopharmaceutical operations. Additionally,
24 for multiple decades working with generators,

1 to evaluate kind of the strengths and
2 weaknesses of each design compared to another.

3 Q. What isotopes have been used in the
4 generators that you have experience with?

5 A. Technetium, gallium, and lead.

6 Q. What is the date range of when you
7 had experience with generators?

8 A. 1988 to present.

9 Q. That's more than 10 years?

10 A. Significantly more than 10 years.

11 Q. You had said you had 10 years of --

12 A. I said I had over 10 years.

13 Q. Whose lead generator did you
14 evaluate?

15 A. There is seven different generators
16 on the market today. We've evaluated them
17 all.

18 Q. When did you perform those
19 evaluations?

20 A. Specifically, I would say some time
21 in the last five years.

22 Q. How did you evaluate those
23 generators?

24 A. Both physical comparison,

1 side-by-side scientific comparison.

2 Q. And which ones of the lead
3 generators that you evaluated were emanation
4 generators?

5 A. I don't recall.

6 Q. Do you recall earlier I asked you
7 about what you would consider a routine task
8 for a person with a bachelor's degree in
9 chemistry, nuclear chemistry, radiochemistry,
10 chemical engineering, physics, materials
11 science, or comparable field of study, plus
12 approximately two or three years of
13 professional experience with radioisotope
14 generators, radiopharmaceutical chemistry, and
15 nuclear chemistry.

16 Do you recall that I asked you
17 that?

18 A. I recall the question.

19 ATTORNEY ROSATO: Objection to the
20 form.

21 Q. And you said: Well, for myself, I
22 don't know that I can answer that question,
23 but then you specifically have some work that
24 you do.

1 Do you recall saying that?

2 ATTORNEY ROSATO: Object to the form.

3 A. I recall the answer, though I would
4 say the question is somewhat nonsensical.

5 Q. Would you please --

6 A. You're not giving me a job task.

7 - - -

8 (Clarification requested by the
9 stenographer.)

10 - - -

11 THE WITNESS: Oh, I'm sorry.

12 A. I believe the question is a bit
13 nonsensical. You're asking me what a task
14 would be for a person with various degrees
15 that may have various roles and
16 responsibilities. I have no idea what that
17 would be in relation to your question.

18 Q. Would you please turn to Page 14 of
19 Exhibit 2002 to the '603 PGR.

20 Do you see Paragraph 32 of your
21 declaration?

22 A. I do.

23 Q. Does this refresh your recollection
24 about whether or not you understand what a

1 routine task of a person of ordinary skill in
2 the art, where that person of ordinary skill
3 in the art is -- sorry, strike that.

4 So do you see in Paragraph 33 where
5 you mention that Dr. Mirzadeh defined a person
6 of ordinary skill in the art as somebody, as
7 of December 5, 2019, who would have had a
8 bachelor's degree in chemistry, nuclear
9 chemistry, radiochemistry, chemical
10 engineering, physics, or materials science or
11 comparable field of study, plus approximately
12 two to three years of professional experience
13 with radioisotope generators,
14 radiopharmaceutical chemistry, nuclear
15 medicine, or other relevant industry
16 experience?

17 ATTORNEY ROSATO: Object to the form.

18 Q. Additional graduate education could
19 substitute for professional experience and
20 significant experience in the field could
21 substitute for formal education?

22 A. I see the paragraph.

23 Q. Did you understand that paragraph
24 when you wrote it?

1 ATTORNEY ROSATO: Object to the form.

2 A. I do not believe I wrote this
3 paragraph.

4 Q. Did you write your declaration?

5 A. This is what Dr. Mirzadeh claimed
6 to be that person of ordinary skill, and I do
7 believe I fit that description.

8 Q. So did you write your declaration?

9 A. I was -- I was certainly part of
10 the process in writing this declaration and
11 agree with everything that's in it.

12 Q. What was the process for writing
13 the declaration?

14 A. Essentially received a fair amount
15 of materials from the attorneys. Reviewed
16 those materials. Went back with the attorneys
17 to explain what was in the materials. Wrote
18 the declaration. Had the original copy.
19 Reread that. Made sure that I agreed with
20 what was there. Modified, reread. Modified,
21 reread until we got to the point where I was
22 comfortable with everything that was written
23 in this document and that the words would be
24 mine.

1 Q. Are these your words?

2 A. These in 33 is -- as it states:

3 Dr. Mirzadeh has provided the following
4 description, so these are Dr. Mirzadeh's
5 words.

6 Q. Do you understand the words as
7 they're written?

8 A. I do understand the words.

9 Q. What would be a routine task of a
10 person of ordinary skill in the art as of
11 this -- based on this definition?

12 ATTORNEY ROSATO: Objection to the
13 form. Foundation.

14 A. I think it would depend on what the
15 job at hand would be.

16 Q. What kind of routine tasks would
17 one of -- would -- strike that.

18 In the text of the '603 patent,
19 what kind of routine tasks would one have
20 assigned to you with a reasonable expectation
21 that you would have been capable of carrying
22 them out?

23 ATTORNEY ROSATO: Objection to the
24 form.

1 A. I believe a routine task would
2 include elution of the generator.

3 Q. Are there any other routine tasks
4 that would have -- strike that.

5 Are there any other routine tasks
6 in the context of the '603 patent that could
7 have been assigned to you with a reasonable
8 expectation that you would have been capable
9 of carrying it out?

10 ATTORNEY ROSATO: Objection to the
11 form.

12 A. I would certainly believe so.

13 Q. Which ones?

14 A. You would have to give me the full
15 list of routine tasks for me to be able to
16 identify that.

17 Q. Sitting here today, are you able to
18 identify any other routine tasks that you
19 would have been capable of carrying out?

20 ATTORNEY ROSATO: Objection to form.

21 A. I don't know what that task list
22 would include.

23 Q. Would you have been asked to design
24 a generator?

1 ATTORNEY ROSATO: Objection to form.

2 A. I've never had cause to be asked to
3 design a generator.

4 Q. Would there be a reasonable
5 expectation that you would have been able to
6 design a generator?

7 ATTORNEY ROSATO: Objection to form.

8 A. I don't believe that's what a
9 person, a POSITA, a person of ordinary skill
10 in the art would be asked to do.

11 ATTORNEY NALL: Objection.
12 Nonresponsive.

13 Q. My question was --

14 ATTORNEY ROSATO: Opposed.

15 Q. -- would there be a reasonable
16 expectation that you would have been able to
17 design a generator?

18 ATTORNEY ROSATO: Objection to form.

19 A. I don't believe that a person -- a
20 person of ordinary skill in the art would be
21 asked to design a generator.

22 ATTORNEY NALL: Objection.
23 Nonresponsive.

24 ATTORNEY ROSATO: Opposed.

1 BY ATTORNEY NALL:

2 Q. Would there have been a reasonable
3 expectation that you would have been able to
4 design a generator?

5 ATTORNEY ROSATO: I'm going to object.
6 This is asked and answered several times now.

7 A. Are you asking if I have the skill
8 set to be able to design a generator?

9 Q. I'm asking whether you could have
10 been asked to design a generator with
11 reasonable confidence that the task would be
12 carried out?

13 ATTORNEY ROSATO: Objection to form and
14 foundation. Asked and answered.

15 A. If asked to design a generator, I
16 could design a generator.

17 Q. Have you ever personally
18 constructed a radioisotope generator?

19 A. I've had no cause to do so.

20 Q. From 1992 to 1993, you worked as a
21 staff pharmacist at Syncor International
22 Corporation; correct?

23 A. Correct.

24 Q. What month in 1992 did you start at

1 Syncor?

2 A. I believe that would be May of
3 1992.

4 Q. Was that right after your
5 graduation from Purdue?

6 A. That's correct.

7 Q. What month in 1993 did you leave
8 Syncor?

9 A. I don't recall.

10 Q. Do you recall if it was the first
11 half of the year or the second half of the
12 year?

13 A. I don't recall.

14 Q. Your CV states that your role as a
15 staff pharmacist -- strike that.

16 Your CV states that in your role as
17 a staff pharmacist, you, quote: Oversaw
18 operations of 15 technical and support staff,
19 end quote, and, quote: Prepared and dispensed
20 radiopharmaceuticals, end quote; correct?

21 ATTORNEY ROSATO: Objection.
22 Foundation.

23 A. Can you show me where it states
24 that, please?

1 Q. Page 5 at the top of Exhibit 2003.

2 A. That's correct.

3 Q. What are the names of some of the
4 people that you oversaw?

5 A. I don't recall.

6 Q. You don't recall any names of
7 anybody that you oversaw?

8 A. I could start listing a few names,
9 but I don't know that I would be able to
10 recall 15 names from 30 years ago.

11 Q. Please list any names that you
12 recall.

13 A. I don't -- I don't have that list.
14 I'm not going to start that exercise.

15 Q. Please list the names. You don't
16 have the choice not to respond.

17 ATTORNEY ROSATO: Well, objection.
18 Asked and answered. If there is any
19 confidentiality, let's just be careful about
20 that.

21 A. I don't -- I don't recall names,
22 first and last names of the staff from 35
23 years ago.

24 Q. What was your tasks that you

1 performed in a typical day at Syncor?

2 A. It would include receiving
3 packages, checking in packages, isolating
4 those isotopes, taking prescription orders,
5 preparing those orders, preparing -- it would
6 be checking in generators, putting away
7 generators, elution of generators, quality
8 control --

9 - - -

10 (Clarification requested by the
11 stenographer.)

12 - - -

13 THE WITNESS: I'm sorry. Elution. I'm
14 sorry for being so fast. Elution of
15 generators.

16 A. Comparing both products,
17 preparation of compounding kits, preparing
18 patient doses within the hood. It's kind of a
19 long list.

20 Q. When did you begin overseeing staff
21 at Syncor?

22 A. May of 1992.

23 Q. So right when you started at
24 Syncor, you were overseeing staff?

1 A. That's correct.

2 Q. You were a practicing
3 radiopharmacist from 1992 to 1999; correct?

4 A. That's correct.

5 Q. And you received your board
6 certification in nuclear pharmacy, BCNP, in
7 1996; correct?

8 A. That's correct.

9 Q. Is your BCNP currently active?

10 A. It is not.

11 Q. When is the last time you held a
12 board certification in nuclear pharmacy?

13 A. I don't recall.

14 Q. As a radiopharmacist, your role was
15 to prepare and dispense radioactive drugs for
16 patient use; correct?

17 A. That is correct.

18 Q. Did anyone at Syncor design or
19 build radioisotope generators during your time
20 there?

21 A. I don't recall.

22 Q. Do you recall where the
23 radioisotope generators came from that were
24 used at Syncor during your time there?

1 A. I don't recall.

2 Q. Did you work with emanation
3 generators at Syncor?

4 A. I don't recall.

5 Q. From 1993 to 1995, you worked at
6 Pyramid Diagnostic Services; correct?

7 A. That's correct.

8 Q. What was Pyramid's business?

9 A. It's also in nuclear pharmacy.

10 Q. What exactly in nuclear pharmacy
11 was Pyramid Diagnostic Services' business?

12 A. The compounding and dispensing of
13 radioactive medications.

14 Q. When in 1993 did you start at
15 Pyramid?

16 A. I don't recall.

17 Q. When in 1995 did you leave Pyramid?

18 A. I don't recall.

19 Q. Your role at Pyramid was director
20 of pharmacy; correct?

21 A. Correct.

22 Q. What were your duties as director
23 of pharmacy at Pyramid?

24 A. To oversee the operations of the

1 pharmacy, including support technical staff.

2 Q. What kind of tasks did you perform
3 in a typical day at Pyramid?

4 A. All the tasks of a staff
5 pharmacist, as well as the managerial tasks,
6 which would include sales and accounting.

7 Q. Did Pyramid itself use any
8 radioisotope generators for production of a
9 radiopharmaceutical?

10 A. Yes.

11 Q. What entity provided that
12 radioisotope generator?

13 A. I don't recall.

14 Q. You've mentioned elution a couple
15 of times today. What did you mean by that
16 word?

17 ATTORNEY ROSATO: Objection to form and
18 foundation.

19 A. Elution is the process of removing
20 the daughter isotopes from the generator to be
21 used in compounding radiopharmaceuticals.

22 Q. Do you know if elution requires
23 liquid chromatography?

24 A. Elution itself does not require

1 liquid chromatography.

2 Q. Do you know if elution means liquid
3 chromatography?

4 A. That's not what the word "elution"
5 means.

6 Q. Do you know if all of the
7 generators you used where you mentioned
8 elution were liquid-based generators?

9 ATTORNEY ROSATO: Objection to form and
10 foundation.

11 A. I don't recall.

12 Q. Did anyone at Pyramid design or
13 build a radioisotope generator during your
14 time there?

15 A. I don't know.

16 Q. Your CV says, quote: Achieved
17 profitability in six months, grew to 2 million
18 in revenue and 70 percent market share.

19 Do you see that?

20 A. I do.

21 Q. Was that due to your efforts?

22 A. That was certainly due to the
23 efforts of the team that I was part of and
24 oversaw.

1 Q. What did you do to help achieve
2 that growth?

3 A. Generated sales and then fulfilled
4 those sales requirements.

5 Q. From 1995 to 1999, you worked at
6 Nycomed Amersham Griffin Pharmacy Services;
7 correct?

8 A. That's correct.

9 Q. What was the relationship between
10 Nycomed and Griffin?

11 A. Nycomed acquired Griffin.

12 Q. When in 1995 did you start at
13 Nycomed Griffin?

14 A. I don't recall.

15 Q. When in 1999 did you leave Nycomed
16 Griffin?

17 A. I don't recall.

18 Q. What were your duties as a pharmacy
19 operations director?

20 A. Similar to or the same as director
21 of pharmacy for Pyramid.

22 Q. Was that your title the entire time
23 you were at Nycomed Griffin?

24 A. I don't recall.

1 Q. What kind of tasks did you do in a
2 typical day at Nycomed Griffin?

3 A. Similar to the tasks done at
4 Pyramid.

5 Q. Did you work as a staff pharmacist
6 at Nycomed Griffin?

7 A. No.

8 Q. Did you dispense
9 radiopharmaceuticals at Nycomed Griffin?

10 A. Yes.

11 Q. Did you work with radioisotope
12 generators at Nycomed Griffin?

13 A. Yes.

14 Q. From where did Nycomed Griffin get
15 their radioisotope generators?

16 A. I don't recall.

17 Q. Did anybody at Nycomed Griffin
18 design or build radioisotope generators during
19 your time there?

20 A. I don't recall.

21 Q. From 1999 to 2000, you worked at
22 CSC Health Care; correct?

23 A. That's correct.

24 Q. Was any of that work as a

1 practicing radiopharmacist?

2 A. It was not.

3 Q. Was any of that work relevant to
4 radioisotope generators?

5 A. It was not.

6 Q. You worked at Eli Lilly from 2000
7 to 2004; correct?

8 A. That's correct.

9 Q. Was any of that work as a
10 practicing radiopharmacist?

11 A. It was not.

12 Q. Was any of that work relevant to
13 radioisotope generators?

14 A. It was not.

15 Q. When did you leave Eli Lilly and go
16 to Covidien?

17 A. Late 2004, early 2005.

18 Q. Was any of your work at Covidien as
19 a practicing radiopharmacist?

20 A. It was not.

21 Q. Was any of your work at Covidien
22 relevant to radioisotope generators?

23 A. Yes.

24 Q. In what way was it relevant to

1 radioisotope generators?

2 A. I oversaw the marketing of our
3 generator within the United States.

4 Q. Did Covidien build radioisotope
5 generators during your time there?

6 A. At the time it was not Covidien.
7 It was Tyco Healthcare Mallinckrodt.

8 Q. Did Tyco Healthcare Mallinckrodt --

9 A. Krodt.

10 Q. -- build radioisotope generators
11 during your time there?

12 A. Yes.

13 Q. Were they emanation radioisotope
14 generators?

15 A. They were not.

16 Q. Were they liquid radioisotope
17 generators?

18 A. They were.

19 Q. Did you design any of those
20 radioisotope generators?

21 A. I did not.

22 Q. Did you build any of those
23 radioisotope generators?

24 A. I did not.

1 Q. From 2005 to 2008, you worked at
2 Curium Pharma as director of product marketing
3 for U.S. nuclear medicine, and global director
4 of product marketing for imaging solutions;
5 right?

6 A. No.

7 Q. What was wrong about what I said?

8 A. You misstated the employer. Or,
9 I'm sorry, can you -- you misstated the
10 employer, yeah. Can you show me where you see
11 that?

12 ATTORNEY NALL: Conroy Exhibit 1,
13 please.

14 - - -

15 (Whereupon, letter dated August 28,
16 2025, from Doug Horton, is received and marked
17 as Exhibit 1 for identification.)

18 - - -

19 CERTIFIED STENOGRAPHER: Exhibit
20 Number 1.

21 BY ATTORNEY NALL:

22 Q. I'm handing you what has been
23 marked Conroy Exhibit Number 1.

24 Do you recognize this document?

1 A. I do.

2 Q. What is this document?

3 A. This document is from the
4 commissioner of patents, the Australian Patent
5 Application 2002038382, regarding the
6 production of highly-purified Lead-212. The
7 document -- it's a letter that says: We lodge
8 herewith a copy of the following documents,
9 which the other front part of the --

10 - - -

11 (Clarification requested by the
12 stenographer.)

13 - - -

14 THE WITNESS: I'm sorry.

15 A. It says: We lodge herewith a copy
16 of the following documents which form together
17 part of the applicant's evidence and answer in
18 relation to the above opposition. Evidence
19 and answer declaration of Charles Shields
20 Conroy, the Conroy declaration, evidence and
21 answer exhibits to the Conroy declaration.

22 ATTORNEY ROSATO: I'll note a standing
23 objection. It's a new document outside the
24 scope of the direct testimony.

1 Q. Starting at what has been marked --
2 what is marked Page 1, which is the second
3 page of Conroy Exhibit 1, is this a
4 declaration that you signed?

5 A. It is.

6 Q. And going to Page 32 of Conroy
7 Exhibit 1, you signed this on August 27, 2005;
8 correct?

9 A. That's correct.

10 Q. Going to Page -- what is marked
11 Page 2 of Conroy Exhibit 1, Paragraph 13 it
12 says: From 2008 -- strike that.

13 Going to Page 2 of Conroy Exhibit
14 1, Paragraph 13, it says: For example, from
15 2005 to 2008, I worked as director of product
16 marketing, U.S. nuclear medicine, and global
17 director of product marketing imaging
18 solutions at Curium Pharma, and it goes on.
19 Is that --

20 A. That's correct.

21 Q. Is this statement in your
22 declaration at Conroy Exhibit 1 accurate?

23 A. It is.

24 Q. Why is Curium Pharma not listed in

1 your CV that is at Exhibit 2003?

2 A. It is. They purchased Tyco. They
3 purchased Tyco Healthcare Mallinckrodt
4 Covidien.

5 So sometimes the names get --
6 sometimes the successor's name is printed, but
7 at the time, it was actually Covidien. At the
8 end of this -- in 2005, it would have been
9 Tyco Healthcare. And then it would have been
10 Tyco Healthcare Mallinckrodt. And then it
11 would have been Tyco. Then it would have been
12 Covidien, and later it's Curium. It's just a
13 series of corporate acquisitions.

14 Q. In your marketing role at Covidien
15 Tyco Curium, did you design or build
16 radioisotope generators?

17 A. I did not.

18 Q. You were at Amerinet from 2010 to
19 2012; correct?

20 ATTORNEY ROSATO: Objection to form and
21 foundation.

22 A. That is correct.

23 Q. You were vice-president of
24 marketing there?

1 A. That's correct.

2 Q. In that role, did you design or
3 build radioisotope generators?

4 A. I did not.

5 Q. You were at Positron from 2012 to
6 2013; correct?

7 A. That's correct.

8 Q. And you were CEO and executive
9 director of sales and marketing; correct?

10 A. That's not correct.

11 Q. What was your role at Positron?

12 A. Chief Operating Officer and
13 executive director.

14 Q. What is the comma sales and
15 marketing in your CV in that title?

16 A. It means that I led the sales and
17 marketing for Positron.

18 That's for my executive director
19 title. I was executive director of sales and
20 marketing.

21 Q. In that role, did you design or
22 build radioisotope generators?

23 A. I did not.

24 Q. You were at Express Scripts from

1 2013 to 2016; right?

2 A. That is correct.

3 Q. You were a senior director of
4 pharmacy operations; correct?

5 A. That is correct.

6 Q. In that role, did you design or
7 build radioisotope generators?

8 A. I did not.

9 Q. Did any of your work at Express
10 Scripts involve radioisotopes?

11 A. It did not.

12 Q. Did any of your work at Positron
13 involve radioisotopes?

14 A. It did.

15 Q. What work at Positron involved
16 radioisotopes?

17 A. We were automating a system that
18 would actually elute a generator to prepare a
19 technetium kit to then make a product, a unit
20 dose of a cardiac agent.

21 Q. Was any of your work at Amerinet
22 involving radioisotope generators?

23 A. It was not.

24 Q. You were at PharmBlue from 2016 to

1 2018; correct?

2 A. That's correct.

3 Q. Did any of your work at PharmBlue
4 involve radioisotope generators?

5 A. It did not.

6 Q. You were at Jubilant Pharma from
7 2018 to 2019; right?

8 A. That's correct.

9 Q. Did any of your work at Jubilant
10 Pharma involve radioisotope generators?

11 A. It did.

12 Q. What work at Jubilant Pharma did
13 you do that involved radioisotope generators?

14 A. Specifically, we had to evaluate
15 different radioisotope generators for purchase
16 into the pharmacy network, and I oversaw the
17 pharmacy network and purchasing.

18 Q. You worked at ARTMS products from
19 2019 to 2022; correct?

20 A. That's correct.

21 Q. Did any of your work at ARTMS --
22 how do you say that?

23 A. ARTMS.

24 Q. Did any of your work at ARTMS

1 involve radioisotope generators?

2 A. It did.

3 Q. What work at ARTMS did you do that
4 involved radioisotope generators?

5 A. We were creating a solid state
6 targetry system. Part of that system was used
7 to make gallium, which is also a generator
8 used for a generator-produced product. So we
9 worked often alongside the generator
10 manufacturers to -- we looked at different
11 ways to supply product either in replacement
12 for or in collaboration with generator
13 manufacturers.

14 Q. In 2022, you founded Nucleus
15 RadioPharma; correct?

16 A. That's correct.

17 Q. What do you mean when you say
18 "different ways to supply product"?

19 ATTORNEY ROSATO: Objection to form and
20 foundation.

21 A. We looked at how we would supply
22 gallium to the person who was making a
23 gallium-based radiopharmaceutical dose.

24 Q. What do you mean by "supply"?

CONFIDENTIAL PORTION

1 A. Provide.

2 Q. Do you mean how to ship something?

3 A. No.

4 Q. What do you mean?

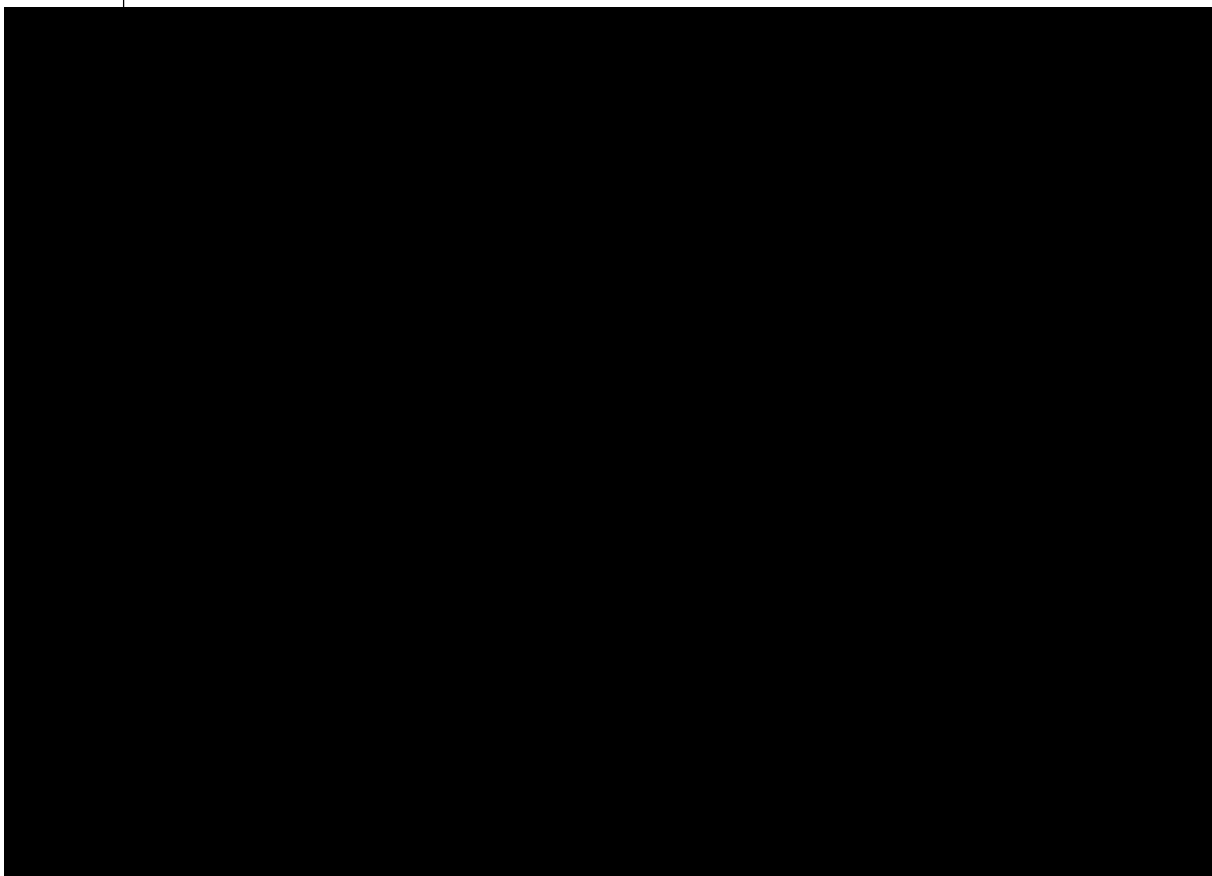
5 A. How to create.

6 Q. Did you receive any founder shares
7 or options at Nucleus RadioPharma?

8 A. I'm willing to discuss that, but I
9 believe it's all confidential.

10 ATTORNEY NALL: We can mark this
11 confidential and have Matt leave the room.

12 ATTORNEY ROSATO: Let's do that.



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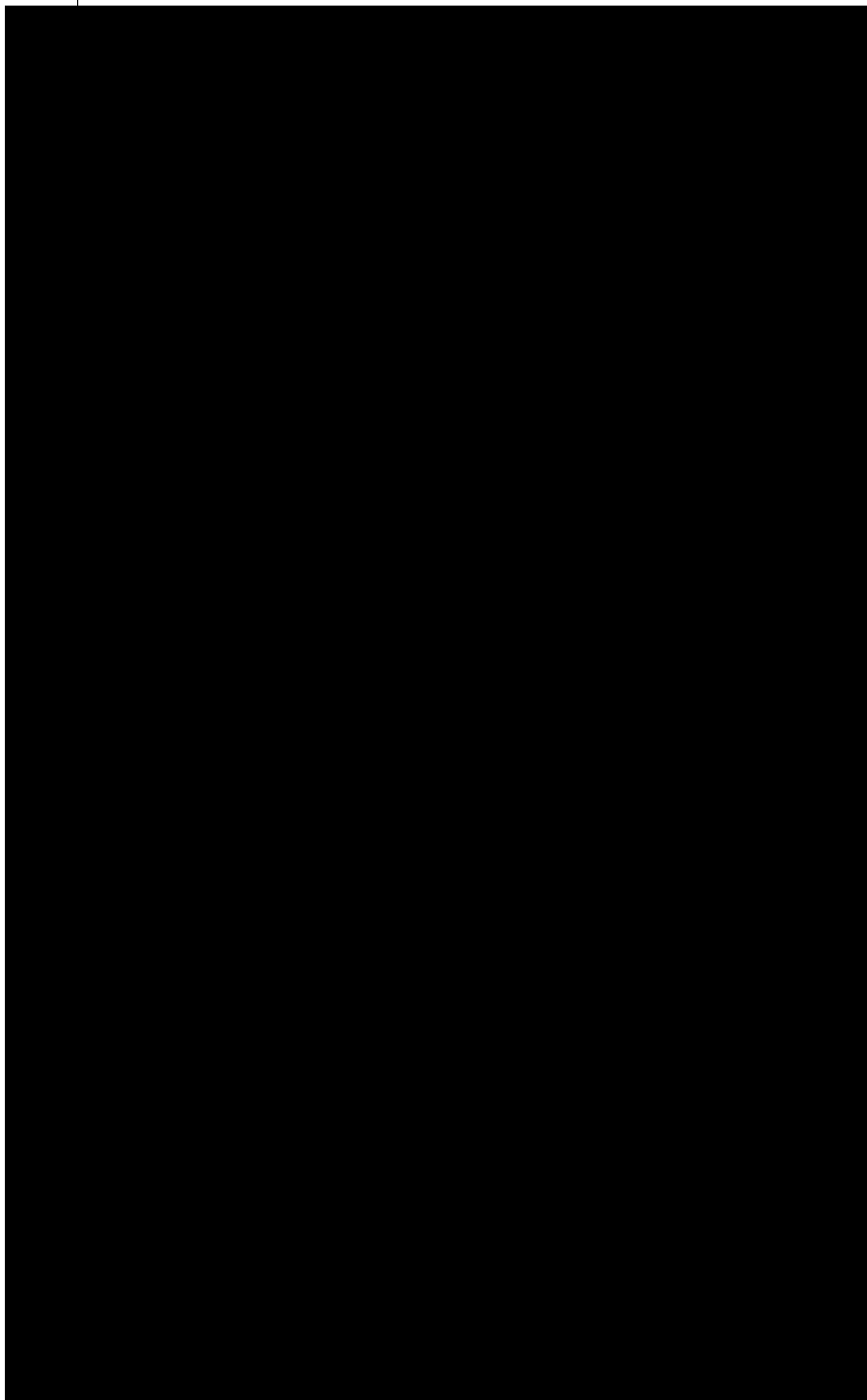
CONFIDENTIAL PORTION
ATTORNEY HEINTZ: Take this one too.

[REDACTED]

[REDACTED]

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1 Q. What did you discuss?

2 A. I asked him specifically what an
3 objection to form was.

4 Q. What did they tell you?

5 A. That it meant that it was hanging
6 by itself and might not have been attached to
7 something else. I didn't know what the
8 phraseology meant.

9 Q. Did you discuss anything else?

10 A. Not that I recall.

11 Q. What factors did you consider when
12 you evaluated different radioisotope
13 generators?

14 A. They're -- in what -- I guess in
15 what situation are you speaking?

16 Q. You testified earlier that in your
17 various roles in your CV, in some of them you
18 evaluated different radioisotope generators;
19 correct?

20 A. That's correct.

21 Q. What factors did you consider when
22 you evaluated different radioisotope
23 generators?

24 A. Well, as a pharmacy director, I

1 would look at the cost, the shipping dates,
2 the amount of material that was produced, and
3 then the overall cost of the generator
4 compared to the amount of material produced.
5 Additionally, we would look at what we would
6 have to do to either both receive and dispose
7 of the generators after we use them.

8 Q. Did you personally review and test
9 each of those generators?

10 A. I have experience with each of
11 those generators.

12 Q. Did you do that evaluation for all
13 seven generators that you mentioned earlier?

14 A. I'm sorry, I think we may be
15 speaking of two different things.

16 Q. What do you think we're speaking
17 of?

18 A. Previously, I thought you were
19 speaking of technetium generators as the staff
20 pharmacist. There were not seven commercial
21 generator manufacturers.

22 Q. Did you personally do that
23 evaluation for the technetium generators that
24 you mentioned earlier?

1 A. What is that? The valuation that I
2 spoke to, the evaluation that I spoke of is
3 how we evaluate technetium generators in my
4 job as the director of pharmacy.

5 Q. To do that evaluation, did you look
6 at data sheets or personally test the
7 equipment?

8 A. Yes.

9 Q. Which one?

10 A. Both.

11 Q. Do you recall participating in a
12 September 2024 recorded discussion with A.
13 Oliver Sartor, M.D., called: Leaders in
14 Radiopharmaceuticals, colon, Disruptive
15 Innovations and Personal Perspective?

16 A. I do.

17 Q. Do you recall discussing the
18 collaboration between Nucleus RadioPharma and
19 ARTBIO?

20 A. I do not.

21 Q. Do you have a favorable opinion of
22 ARTBIO's intellectual property from your prior
23 collaborations with ARTBIO?

24 A. I do not.

1 Q. Do you have a negative opinion of
2 ARTBIO's intellectual property from your prior
3 collaborations with ARTBIO?

4 A. I do not.

5 Q. What was your prior collaboration
6 with ARTBIO before this matter?

7 A. They were one of many customers for
8 Nucleus RadioPharma.

9 Q. Do you recall that they were the
10 first customer for Nucleus RadioPharma?

11 A. I do not recall that.

12 Q. Are you the inventor of any
13 patents?

14 A. I am not.

15 Q. Have you published any
16 peer-reviewed scientific publication regarding
17 radioisotope generators?

18 A. I have not.

19 Q. Your career includes no position
20 where you conducted scientific research
21 involving radioisotope generators; correct?

22 A. That is correct.

23 ATTORNEY ROSATO: Objection to the
24 form.

1 A. That's correct.

2 Q. In your declaration, you did not
3 provide an opinion regarding what you consider
4 the level of a person of ordinary skill in the
5 art for the patent; right?

6 ATTORNEY ROSATO: Objection to form.
7 Foundation.

8 A. I don't believe I did.

9 Q. In your declaration, you do not
10 state that Dr. Mirzadeh is wrong about the
11 level of a person of ordinary skill in the art
12 as of the critical date; right?

13 A. Can we go back and look at that
14 specifically?

15 Q. Of course.

16 A. It was 14?

17 Q. Exhibit 2003. Sorry, strike that.
18 It's Exhibit 2002.

19 A. I'm sorry, can you repeat the
20 question?

21 Q. In your declaration, you do not
22 state that Dr. Mirzadeh is wrong about the
23 level of a person of ordinary skill in the art
24 as of the critical date; correct?

1 A. That is correct.

2 Q. Prior to this matter, were you
3 familiar with Sciencons?

4 A. Only generally.

5 Q. Prior to this matter, how were you
6 familiar with ARTBIO?

7 A. As stated previously, they were a
8 customer of Nucleus RadioPharma.

9 Q. Were you familiar with ARTBIO in
10 any other way?

11 A. Not that I'm aware.

12 Q. Do you own any financial interest
13 in ARTBIO?

14 A. I do not.

15 Q. Do you own any financial interest
16 in Sciencons?

17 A. I do not.

18 - - -

19 (Whereupon, document entitled CDMO
20 Nucleus RadioPharma links up with ARTBIO to
21 help produce prostate cancer candidate for
22 clinical trials, May 7, 2024, is received and
23 marked as Exhibit 3 for identification.)

24 - - -

1 CERTIFIED STENOGRAPHER: Exhibit
2 Number 3.

3 THE WITNESS: Thank you.

4 BY ATTORNEY NALL:

5 Q. I'm handing you what has been
6 marked as Conroy Exhibit Number 3.

7 Have you seen this before?

8 A. I have.

9 Q. What is this?

10 A. This is an article from Fierce
11 Pharma titled: CDMO Nucleus RadioPharma Links
12 up with ARTBIO to Help Produce --

13 - - -

14 (Clarification requested by the
15 stenographer.)

16 - - -

17 THE WITNESS: I'm sorry. CDMO Nucleus
18 RadioPharma Links up with ARTBIO to Help
19 Produce Prostate Cancer Candidate for --
20 sorry, Produce Cancer Candidate for Clinical
21 Trials.

22 ATTORNEY ROSATO: There is an objection
23 to this document. Outside the scope,
24 authenticity, but you can continue.

1 Q. Do you see on Page 1, the first
2 full sentence of the article, it says that:
3 Its first commercial partnership with
4 clinical-stage radiopharmaceut -- radiopharma
5 player ARTBIO?

6 A. I see that's written there, yes.

7 Q. Does this refresh your recollection
8 that ARTBIO was Nucleus Pharma's first
9 commercial partnership?

10 A. I see where it's stated there. I'm
11 not -- I'm not sure that that was actually the
12 case. I'd have to go back to the source
13 material, the actual news release to see.

14 Q. In May of 2024, were you the CEO of
15 Nucleus RadioPharma?

16 A. Yes.

17 Q. And you don't recall whether the
18 collaboration with ARTBIO was Nucleus
19 RadioPharma's first commercial partnership?

20 A. As I stated, Nucleus had many
21 customers and I'm not actually sure which
22 customer contracted first.

23 Q. Would you say that the first
24 commercial partnership was an important

1 milestone for RadioPharma?

2 ATTORNEY ROSATO: Objection to form.

3 A. I'd say any first customer is an
4 important customer. If there is any second
5 customer, any customer.

6 - - -

7 (Clarification requested by the
8 stenographer.)

9 - - -

10 A. Yes, sir, I think all customers are
11 important. Certainly the first customer is
12 important as well.

13 - - -

14 (Whereupon, document Pages 1
15 through 5 of an ARTBIO website titled: ARTBIO
16 and Nucleus RadioPharma Announce Collaboration
17 to Manufacture GMP-Grade Therapeutic Products
18 Containing Radioisotope Pb-212 to Support
19 Emerging Clinical Trials, is received and
20 marked as Exhibit 4 for identification.)

21 - - -

22 CERTIFIED STENOGRAPHER: Exhibit
23 Number 4.

24 THE WITNESS: Thank you.

1 BY ATTORNEY NALL:

2 Q. Do you recognize Conroy Exhibit
3 Number 4?

4 ATTORNEY ROSATO: Hold on.

5 A. In part. This is -- this also
6 contains patent materials so --

7 ATTORNEY ROSATO: Yeah.

8 A. -- so other issues that --

9 ATTORNEY ROSATO: This looks like
10 multiple documents stapled together and mixed
11 up.

12 ATTORNEY NALL: Conroy Exhibit 4 is
13 just the first five pages. The rest of it can
14 be removed.

15 BY ATTORNEY NALL:

16 Q. Would you please remove the --

17 A. (Complies.)

18 Q. Thanks.

19 ATTORNEY ROSATO: This is a new
20 document. I'll preserve all objections.

21 ATTORNEY NALL: For the record, I'm
22 marking Conroy Exhibit 4 as Pages 1 through 5
23 of an ARTBIO website titled: ARTBIO and
24 Nucleus RadioPharma Announce Collaboration to

1 Manufacture GMP-Grade Therapeutic Products
2 Containing Radioisotope Pb-212 to Support
3 Emerging Clinical Trials.

4 Q. Do you recognize this document?

5 A. I've not seen this document in this
6 form before.

7 Q. Would you please turn to Page 2.
8 Do you see the paragraph that starts with,
9 quote, this? It's the third paragraph down?

10 A. Yes.

11 Q. It says, quote: This strategic
12 partnership with ARTBIO underscores our
13 unwavering commitment to transforming the
14 lives of cancer patients through
15 groundbreaking therapies, end quote, said
16 Charles S. Conroy, Chief Executive Officer of
17 Nucleus, quote: We are thrilled to unite in
18 our mission to address the pressing need for
19 innovative radiopharmaceuticals, ensuring that
20 patients have access to potentially
21 life-changing treatments with the highest --
22 with the highest quality and supply chain
23 resilience.

24 Do you see that?

1 A. I do.

2 Q. Is that an accurate quote of yours?

3 A. Yes.

4 Q. Were you thrilled for the
5 collaboration between ARTBIO and Nucleus
6 RadioPharma?

7 A. As this allows us to treat cancer
8 patients, yes, I'm thrilled.

9 Q. On Page 1 of Conroy Exhibit 4, do
10 you see where the subtitle says: Agreement
11 signifies important milestone as Nucleus
12 RadioPharma's first commercial partnership?

13 A. I do.

14 Q. Do you agree with that title?

15 A. I agree that's what it reads.

16 Q. Do you agree with the statement
17 that it's an important milestone as Nucleus
18 RadioPharma's first commercial partnership?

19 A. As stated previously, I'm not
20 certain that that was our first commercial
21 partnership. It may have been announced -- it
22 may have been the first commercial partnership
23 announced.

24 Do you have the Nucleus press

1 release by chance?

2 This is ARTBIO's press release, so
3 their wording, hence I cannot be convinced
4 that what it says is true.

5 Q. I'm sure if your counsel wants to
6 introduce a press release from ARTBIO, he can
7 do so on his time.

8 ATTORNEY ROSATO: Objection.

9 - - -

10 (Whereupon, document previously
11 marked Exhibit 1001, is received and marked as
12 Exhibit 1001 for identification.)

13 - - -

14 BY ATTORNEY NALL:

15 Q. I'm handing you Exhibit 1001 of the
16 29PGR, which is the '603 PGR.

17 Do you have that?

18 CERTIFIED STENOGRAPHER: Keep it.

19 A. I do.

20 ATTORNEY ROSATO: The '603 patent,
21 right?

22 ATTORNEY NALL: What did I say? Sorry.

23 BY ATTORNEY NALL:

24 Q. I'm handing you Exhibit 1001 of the

1 29PGR. The 29PGR corresponds to the '603 PGR.

2 Do you have Exhibit 1001?

3 A. I do have Exhibit 1001.

4 Q. And it's the '603 patent; correct?

5 A. That is correct.

6 Q. Would you please turn to Column 10,
7 Lines 1 through 7 of the '603 patent. Are you
8 there?

9 A. Yes.

10 Q. Would you please read Lines 1
11 through 7 and tell me when you're done.

12 A. The Lead-212 precursor isotope
13 can --

14 - - -

15 (Clarification requested by the
16 stenographer.)

17 - - -

18 THE WITNESS: Yes.

19 A. The Lead-212 precursor isotope can
20 associated with needle, rod, or a script of
21 material of which Lead-212 precursor isotope
22 source is attached to allow diffusion of
23 Radon-220. The source may or may not contain
24 a holder for the radioactive part and a grid

1 or ring or similar surrounding the source to
2 prevent cross-contamination when the lead
3 precursor isotope source is withdrawn from the
4 container. That's the end.

5 Q. Do you see that the '603 patent
6 explicitly states that: The source may or may
7 not contain a holder for the radioactive part
8 and a grid or ring or similar surrounding
9 structure surrounding -- or similar
10 surrounding the source?

11 ATTORNEY ROSATO: Objection to form.

12 A. The source may or may not contain a
13 holder for the radioactive part and a grid or
14 ring similar surrounding the source to prevent
15 cross-contamination when the Lead-212
16 precursor's isotope source is withdrawn from
17 the container.

18 Q. So you agree that the '603 patent
19 explicitly states that?

20 A. It explicitly states: The source
21 may or may not contain a holder for the
22 radioactive part and a grid or ring similar
23 surrounding the source to provide
24 cross-contamination of when the lead precursor

1 isotope source is withdrawn from the
2 container.

3 Q. What are examples of holders in the
4 '603 patent?

5 ATTORNEY ROSATO: Objection to form and
6 foundation.

7 ATTORNEY NALL: I'm going to ask you to
8 keep your objections to form, please.

9 ATTORNEY ROSATO: I'm going to object
10 as I see appropriate. Foundation objections
11 are perfectly appropriate.

12 A. I'm sorry, can you restate the
13 question?

14 BY ATTORNEY NALL:

15 Q. What are examples of holders in the
16 '603 patent?

17 ATTORNEY ROSATO: The same objection.

18 A. The holder would include a wall
19 that could be a course wall or a mineral wall.

20 Q. Does a course wall decay?

21 A. Not that I'm aware of.

22 Q. Does a mineral wall decay?

23 A. Not that I'm aware of.

24 Q. Is the rod in the '603 patent an

1 example of a holder?

2 ATTORNEY ROSATO: Object to form and
3 foundation.

4 A. I believe the rod would -- as
5 called out as needle, rod, or script would be
6 separately called out, it could be considered
7 a holder.

8 ATTORNEY NALL: What is your exact
9 objection to form, counsel, on this question?

10 ATTORNEY ROSATO: You want me to go
11 into this in front of the witness.

12 ATTORNEY NALL: Sure.

13 ATTORNEY ROSATO: Well, you're
14 referring to the rod and you're not saying
15 what rod you're referring to. There is a
16 whole entire patent here with various
17 different figures, different embodiments. So
18 your question is untethered to anything
19 specific that would give the witness the
20 ability to answer that with precision. A lot
21 of your questions are like that. They're
22 untethered to specificity. It's very
23 difficult for someone to answer that question
24 when they don't know what you're referring to.

1 Is that a sufficient explanation?

2 BY ATTORNEY NALL:

3 Q. Mr. Conroy, did you know what I was
4 referring to when I said "the rod" in the '603
5 patent?

6 A. Not specifically. I was going back
7 in the line above that where it said: The
8 precursor isotope source can be associated --

9 - - -

10 (Clarification requested by the
11 stenographer.)

12 - - -

13 THE WITNESS: I'm sorry.

14 A. Not specifically. I was going back
15 to what I had read before where it said: The
16 precursor isotope source may be associated
17 with a needle, rod, or script of material.
18 The rod is obviously not the precursor isotope
19 source because it does not decay to progeny
20 isotopes, so I guess it could be --

21 - - -

22 (Clarification requested by the
23 stenographer.)

24 - - -

1 THE WITNESS: To progeny isotopes, so I
2 guess it could be considered a holder.

3 Q. Would you please turn to Claim 1.
4 Do you see the word "comprising" in the first
5 sentence line of Claim 1?

6 A. I'm sorry, maybe I'm in the wrong
7 spot.

8 Q. Are you at Claim 1?

9 A. (Indicating.)

10 Q. Do you know what claims mean?

11 A. I'm sorry, we're back here? Yes,
12 I'm sorry. I'm trying to find specifically
13 where you are. Sorry, there is a lot claims
14 in a lot of different --

15 Q. The claims are at the end of the
16 patent. Do you see Claim 1 at the page --
17 it's in Column 21?

18 A. Yes.

19 Q. You see approximately Lines 43 and
20 44 that says: One, dot, a method of
21 generating isotopes, comma, the method
22 comprising, colon?

23 A. Yes.

24 Q. What do you understand the word

1 "comprising" means in that part of Claim 1?

2 ATTORNEY ROSATO: Objection. Form.

3 A. In that form, I believe it means to
4 include -- to include what's going to be
5 specifically listed --

6 - - -

7 (Clarification requested by the
8 stenographer.)

9 - - -

10 THE WITNESS: I'm sorry. In the form
11 that she asked, I believe it means to be -- to
12 include statements to be specifically outlined
13 later. So the method comprises three
14 different aspects.

15 Q. Are you aware whether the word
16 "comprising" allows additional elements in
17 addition to the three that are outlined in the
18 claim?

19 ATTORNEY ROSATO: Objection to form.

20 A. I believe the -- but here, the
21 method comprising would be the three specific
22 things that are listed under the method
23 comprising.

24 Q. So you don't know whether or not

1 "comprising" allows additional elements in
2 addition to the three that are specifically
3 listed?

4 A. I would --

5 ATTORNEY ROSATO: Objection to form.
6 Misstates.

7 A. I'm not an attorney, but I would
8 assume that the claim language would be the
9 claim language specifically.

10 Q. Do you see Claim 10?

11 A. Yes.

12 Q. Claim 10 says: The method of
13 Claim 1 wherein allowing sufficient time for
14 the precursor isotope source to decay
15 comprises allowing 5 hours, 10 hours, 20
16 hours, 24 hours, 48 hours, 72 hours, or 96
17 hours; correct?

18 A. That's -- that is read as correct.

19 Q. Would allowing six hours satisfy
20 Claim 10?

21 A. I believe so.

22 Q. Is it your opinion that allowing
23 decay of anything more than five hours
24 satisfies Claim 10?

1 A. It would be my opinion anywhere
2 between 5 hours and 96 hours.

3 Q. Is it your opinion that 97 hours
4 would not satisfy Claim 10?

5 ATTORNEY ROSATO: Objection to form.

6 A. As I think -- as I rethink and
7 reanswer, I think it would be any amount of
8 hours as decay is statistically -- I shouldn't
9 say "random" is not the correct word. It's an
10 ever continuing process.

11 Q. When you say allowing any amount of
12 hours, do you mean any amount over five hours
13 or any amount at all?

14 ATTORNEY ROSATO: Objection to form.

15 A. I would mean any amount at all.

16 Q. In your opinion, what do the words
17 "allowing 5 hours, 10 hours, 20 hours, 24
18 hours, 48 hours, 72 hours, or 96 hours" mean?

19 A. It means 5 hours, 10 hours, 20
20 hours, 24 hours, 48 hours, and 72 hours, and
21 96 hours.

22 Q. What does that limitation require?

23 ATTORNEY ROSATO: Objection. Asked and
24 answered.

1 A. I believe they were looking for an
2 amount to allow sufficient time for the
3 precursor isotope source to decay and be in
4 collectable amounts.

5 Q. Would you please turn to Claim 20.
6 Are you there?

7 A. Yes.

8 Q. Do you see that Claim 20 includes
9 the words: The precursor isotope source is
10 configured to decay and emanate in the one or
11 more progeny isotopes into the container for 5
12 hours, 10 hours, 20 hours, 24 hours, 48 hours,
13 72 hours, or 96 hours?

14 A. Yes.

15 Q. Do you see that the words in
16 Claim 20 are different from the words in
17 Claim 10?

18 A. Yes.

19 Q. What does the difference between
20 the words in Claim 20 compared to the words in
21 Claim 10 mean to you?

22 ATTORNEY ROSATO: Objection to form.
23 Scope.

24 A. Claim 10 states: Allowing

1 sufficient time for the precursor isotope
2 source to decay. Claim 20 states: Wherein
3 the precursor isotope source --

4 - - -

5 (Clarification requested by the
6 stenographer.)

7 - - -

8 THE WITNESS: I'm sorry. Claim 20, it
9 says: Wherein the precursor isotope source is
10 configured to decay and emanate the one or
11 more progeny isotopes.

12 Q. Are you done answering?

13 A. I'm sorry, was -- can you repeat
14 your question?

15 Q. What does the difference between
16 the words in Claim 20 compared to the words in
17 Claim 10 mean to you?

18 ATTORNEY ROSATO: Objection to form.
19 Scope. Asked and answered.

20 A. One states allowing sufficient
21 time. The other does not have the same
22 statement, and the one speaks to progeny
23 isotopes, and the other does not.

24 Q. Do you have an opinion about what

1 the word "emanation" means?

2 ATTORNEY ROSATO: Objection to form and
3 foundation.

4 A. I believe it means to give off in a
5 different form.

6 Q. Does a gas emanate?

7 A. It may.

8 ATTORNEY ROSATO: Objection to form.

9 Q. Does a liquid emanate?

10 ATTORNEY ROSATO: Objection to form.

11 A. It may.

12 Q. Does a solid emanate?

13 ATTORNEY ROSATO: Objection to form.

14 A. A solid can emanate a gas or a
15 liquid.

16 Q. Does a solid emanate in the solid
17 form?

18 ATTORNEY ROSATO: Objection to form.

19 A. I'm not sure.

20 Q. Would you please turn to Figure 1
21 of the '603 patent.

22 Are you there?

23 A. I am.

24 Q. What is Figure 1 of the '603

1 patent.

2 A. Figure 1 of the '603 patent is the
3 decay chain from Thorium-232. Ultimately the
4 stable Lead-208.

5 Q. Radon is the only gas depicted in
6 Figure 1; correct?

7 ATTORNEY ROSATO: Objection to form.

8 A. I'm not sure.

9 Q. Do you know whether radon emanates?

10 ATTORNEY ROSATO: Objection to form.

11 A. It's possible.

12 Q. Sitting here today, you can't say
13 for sure whether radon emanates?

14 ATTORNEY ROSATO: Objection to form.

15 Asked and answered. Misstates.

16 A. It's possible.

17 Q. Would you expect scientific papers
18 to discuss the emanation of radon?

19 ATTORNEY ROSATO: Objection to form.

20 Foundation. Scope.

21 A. There are papers that discuss the
22 emanation of radon.

23 Q. What is 224RA?

24 A. It's Radium-224.

1 Q. Does Radon-220 emanate from
2 Radium-224?

3 A. It's possible.

4 Q. Is it possible that Radon-220 does
5 not emanate from Radium-224?

6 A. That would also be possible.

7 ATTORNEY ROSATO: Object to form.

8 Q. What is 216 Polonium -- sorry, what
9 is -- strike that.

10 What does 216Po stand for?

11 A. Polonium-216.

12 Q. Does --

13 THE WITNESS: Can we take a break for a
14 second? Thanks.

15 ATTORNEY NALL: Sure.

16 CERTIFIED STENOGRAPHER: Off the
17 stenographic record at 11:03 a.m.

18 - - -

19 (Whereupon, a short recess was
20 taken.)

21 - - -

22 CERTIFIED STENOGRAPHER: Back on the
23 stenographic record at 11:18 a.m.

24 - - -

(Whereupon, document previously
marked Exhibit 1003, is received and marked as
Exhibit 1003 for identification.)

- - -

BY ATTORNEY NALL:

Q. I'm handing you what has been
previously marked -- been marked Exhibit 1003.

Do you have that?

A. I do.

Q. Would you please turn to Figure 2.

ATTORNEY ROSATO: Hold on. I'm just
looking for -- oh, I'm sorry. I found the
mark, the labeling. Sorry. Never mind.

ATTORNEY MEDLEY: This is in color, is
that right?

BY ATTORNEY NALL:

Q. Are you at Figure 2 of
Exhibit 1003?

A. Yes.

Q. How does a person operate the
device in Figure 2 --

ATTORNEY ROSATO: Objection to form.

Q. -- to Exhibit 1003?

A. So to operate the device on

1 Exhibit 1003, Figure 2, you first have to load
2 a polyethylene bottle into the lower
3 collection chamber. Seal that. Remove the
4 tube that is attached to a filering basket,
5 F-I-L-E-R-I-N-G. Remove the filering basket
6 from the tube. Place the material in the
7 filering basket. Place that back into the
8 assistant.

9 Then essentially to operate the
10 generator at that time, you'd have to toggle
11 the toggle lever to open the gate valve. And
12 then as described in the article, the tube
13 would be pushed through the gate valve into
14 the polyethylene bottle.

15 Q. Do you agree that the device in
16 Figure 2 of the -- of Exhibit 1003 is sealed
17 such that radioisotopes don't escape during
18 operation?

19 ATTORNEY ROSATO: Objection to form.

20 A. In the sense that the generator --
21 as depicted in Figure 2, after the material is
22 filled and the generator is in kind of this
23 ready position, for lack of a better
24 terminology, the O-ring at the -- just south

1 of the tube should -- and this being a
2 gas-type subsystem, this -- nothing should
3 escape from between the O-ring in the bottom
4 of the collection chamber.

5 Q. Would you expect anything to escape
6 from the inside of the device through the gate
7 valve to the outside environment?

8 A. Not to the outside environment.

9 Q. If the O-rings in Exhibit 1003,
10 Figure 2 fail, what happens?

11 A. If the gate valve is closed, gas
12 could potentially emanate from the O-rings out
13 through from where the tube and the O-rings
14 are connected.

15 Q. Is that different if the gate valve
16 is open?

17 A. If the gate valve is open, that
18 begins the exposure process, and gas would
19 also -- as soon as the gate valve is open, gas
20 would be released towards the polyethylene
21 bottle.

22 Q. Have you ever personally operated
23 an emanation-based radioisotope generator?

24 A. No.

1 Q. Would you expect safety of the
2 operator to be important in the operation of a
3 radioisotope generator?

4 A. Yes.

5 ATTORNEY ROSATO: Objection to form.

6 A. Yes.

7 Q. What might happen to the operator
8 if radioactive gas leaks from a device during
9 the operation of an emanation-based
10 radioactive isotope generator?

11 A. If additional security measures
12 aren't in place, it's possible that there
13 would be exposure to the operator.

14 Q. Is safety of the operator important
15 when operating an emanation-based -- I already
16 asked that. Never mind.

17 ATTORNEY ROSATO: Are you striking that
18 question?

19 ATTORNEY NALL: Strike that.

20 BY ATTORNEY NALL:

21 Q. When the gate valve is closed, do
22 you agree that the Hassfjell-Hoff system is
23 designed to prevent radioactive gas from
24 leaking outside of the device?

1 ATTORNEY ROSATO: Object to the form.

2 A. Yes.

3 Q. When the gate valve is

4 open -- strike that.

5 When the device is in the ready
6 position and the operator opens the toggle for
7 the gate valve, do you agree that the system
8 is designed to prevent radioactive gas from
9 leaking outside the device?

10 ATTORNEY ROSATO: Object to the form.

11 A. Outside of the complete generator
12 system, yes.

13 Q. When the tube in Hassfjell-Hoff
14 Exhibit 1003, Figure 2 is pushed all the way
15 down, do you agree that the system is designed
16 to prevent radioactive gas from leaking
17 outside the device?

18 ATTORNEY ROSATO: Object to the form.

19 A. Out of the entire generator system,
20 yes.

21 Q. Where is the source located when
22 the tube is pushed all the way down in
23 Hassfjell-Hoff Exhibit 1003, Figure 2?

24 A. The source is contained inside of a

1 membrane packet, which is contained inside of
2 a filering basket.

3 Q. And when the tube is pushed all the
4 way down, where is that membrane packet inside
5 of the filering basket located?

6 A. When the tube is pushed all the way
7 down, the filering basket is located inside of
8 the polyethylene bottle.

9 Q. And when the tube is pulled all the
10 way up as far as it will go in the ready
11 position in the device, where is the source
12 located?

13 A. The source is located inside of the
14 membrane packet inside of the filering basket
15 above the gate valve.

16 Q. How does an operator move the
17 source in this Figure 2?

18 ATTORNEY ROSATO: Objection to form.

19 A. To move the source, they would --
20 to move the source, they would have to move
21 the membrane packet, the filering basket, and
22 the rod. So they would open the gate valve,
23 push the rod down. The source inside the
24 membrane basket and the filering -- inside the

1 membrane packet inside the filering basket
2 would then be pushed into the polyethylene
3 bottle.

4 Q. Before you were hired for this
5 matter, had you ever heard of Dr. Saed
6 Mirzadeh?

7 A. I had not.

8 Q. In Exhibit 1003, Figure 2, does the
9 source always move with the rod?

10 ATTORNEY ROSATO: Objection to form.

11 A. There is no rod depicted.

12 Q. In Exhibit 1003, Figure 2, does the
13 source always move with the tube?

14 ATTORNEY ROSATO: Objection to form.

15 A. If the source is loaded in the
16 filering basket, the filering basket and the
17 tube would move together.

18 Q. Would you please turn to
19 Exhibit 2002 of the '603 PGR. It's your
20 declaration. I handed it to you earlier.

21 A. I'm sorry, turn to what page?

22 Q. Paragraph 99. It's Page 43. Are
23 you there?

24 A. I am.

1 Q. Do you see where you wrote the
2 sentence: Claim 2 is not required to
3 encompass all possible embodiments, and this
4 language -- in the language of this limitation
5 simply confirms that the precursor isotope
6 source includes some ^{22}HTh that decays to
7 produce at least one of ^{220}Rn and ^{212}Pb ?

8 ATTORNEY ROSATO: Objection. Form.

9 Q. It's the last sentence of Paragraph
10 99.

11 A. Yeah, I see that.

12 Q. Do you understand that a
13 specification is required to enable the full
14 scope of the claims?

15 ATTORNEY ROSATO: Objection to the
16 form.

17 A. Yes, I do.

18 Q. In the '603 patent, Claim 2, if
19 you'd turn to the '603 patent, Claim 2, do you
20 see that it has the words "and/or"?

21 A. Yes, I do.

22 Q. What does that mean in Claim 2?

23 A. It -- it reads: The surface of the
24 precursor isotope source comprises exposing

the interior source to radium -- I'm sorry, to Thorium-228 isotope and/or radium isotope. So it could mean that the interior surface to the precursor isotope source comprises exposing the interior surface to a thorium isotope and a radium isotope. Alternatively it could mean exposing the interior surface to a thorium isotope or a radium isotope. So that either -- either or both may be present.

Q. So you agree that it covers three different scenarios? One, 228 thorium; two, 224 radium; or three, a combination of the two?

ATTORNEY ROSATO: Objection to form.

A. It can comprise, yes, them together or in singular.

Q. Earlier, do you recall that I asked you whose lead generator did you evaluate, and you responded: There is seven different generators on the market today. We've evaluated them all?

A. I do.

Q. Why did you perform an evaluation of those seven generators?

1 A. To have an understanding of what
2 the lead generator market was, that was done
3 long before I was engaged in this case.

4 Q. When was that evaluation performed?

5 A. During my time at Nucleus
6 RadioPharma.

7 Q. What did you evaluate those seven
8 generators for exactly?

9 A. To have a market understanding of
10 what their source material was, as well as
11 their method of generating Lead-212, whether
12 that was an emanation-based generation or a
13 matrix-based generation.

14 Q. What did you mean when you said
15 those were seven generators on the market?

16 A. There was seven generators --
17 sorry, that would be the incorrect terminology
18 if I said that. There are seven generators
19 that we know of that are in development.
20 They're the seven most prevalent generators in
21 development.

22 Q. Who are the manufacturers of those
23 seven generators?

24 A. I don't recall without having that

1 material in front of me.

2 Q. Did you personally perform any
3 tests of those seven generators?

4 A. No. No testing was performed.

5 Q. Who did the evaluation of those
6 seven generators?

7 A. The evaluation was completed by
8 several members of my staff. It was an
9 assessment of what was on the market and
10 coming to market as we looked at potential
11 clients.

12 Q. What exactly did those staff
13 members do?

14 ATTORNEY ROSATO: Objection to form.
15 Asked and answered.

16 A. Review the qualities of the
17 generators that we believe were most likely to
18 be at some point commercially available on the
19 market.

20 Q. What did you personally do with
21 respect to that evaluation?

22 A. Reviewed the materials and came to
23 an understanding of what was on the market at
24 that time.

1 Q. What qualities of the generators
2 did you evaluate -- did your team evaluate?

3 ATTORNEY ROSATO: Object to the form.

4 A. I don't know the full length
5 without having that material in front of me.

6 Q. Did they review cost?

7 A. I do not recall.

8 Q. Did they review safety?

9 A. I do not recall.

10 Q. Would safety have been important to
11 you?

12 A. When producing radioactive
13 pharmaceuticals, safety is always important.

14 Q. Were the generators shipped to
15 Nucleus?

16 A. I don't recall.

17 ATTORNEY NALL: Let's take a 10-minute
18 break.

19 CERTIFIED STENOGRAPHER: Off the
20 stenographic record at 11:40 a.m.

21 - - -

22 (Whereupon, a short recess was
23 taken.)

24 - - -

1 CERTIFIED STENOGRAPHER: Back on the
2 stenographic record at 11:55 a.m.

3 ATTORNEY NALL: With respect to the
4 '603 patent only, I pass the witness.

5 ATTORNEY ROSATO: Okay. Let's take a
6 quick break.

7 CERTIFIED STENOGRAPHER: Off the
8 stenographic record at 11:56 a.m.

9 - - -

10 (Whereupon, a short recess was
11 taken.)

12 - - -

13 CERTIFIED STENOGRAPHER: Back on the
14 stenographic record at 12:04 p.m.

15

16 EXAMINATION BY ATTORNEY ROSATO:

17 BY ATTORNEY ROSATO:

18 Q. Mr. Conroy, do you recall earlier
19 today discussing the generator in Figure 2 of
20 the Hassfjell-Hoff reference?

21 A. I do.

22 Q. And Figure 2 to be clear is -- and
23 the Hassfjell-Hoff reference I'm referring to
24 is Exhibit 1003; correct?

1 A. Yes.

2 Q. Okay. Do you recall discussing the
3 possibility of leakage in the generator?

4 A. Yes.

5 Q. Okay. Can you turn to Page 7 of
6 the Hassfjell-Hoff reference, the previous
7 page, and let me know when you're there.

8 A. I am. I'm there.

9 Q. Does Hassfjell-Hoff on Page 7
10 discuss leakage?

11 A. Yes.

12 Q. Where does it discuss leakage?

13 A. Under the subheading "The
14 Generator" it says: The generator shown in
15 Figures 2 and 3, all generator parts were made
16 of stainless steel and connected to standard
17 high vacuum equipment to avoid leakage of
18 radioactivity to its surroundings.

19 Q. Okay. It refers to vacuum
20 equipment to avoid leakage of radioactivity;
21 is that correct?

22 A. That's correct.

23 ATTORNEY NALL: Objection. Form.

24 Q. And you're referring to the section

1 that's titled: The Generator; correct?

2 A. That's correct, yeah.

3 Q. And further down in that paragraph
4 what does it say about neutralizing pressure
5 differences?

6 A. It says --

7 ATTORNEY NALL: Object. Objection.
8 Scope. Form.

9 A. It says: To neutral pressure
10 differences, when the tube is moved, an on-off
11 valve, VAT, with connection to the filtered
12 air outlet is placed in the upper chamber.

13 Q. Can you explain what that means?

14 ATTORNEY NALL: Objection. Form.
15 Scope.

16 A. It means that the collection
17 chamber -- the valve is -- the valve is turned
18 on to allow air to actually escape from the
19 system.

20 Q. Okay. So the system is not sealed.
21 It actually has a filtered air outlet; is that
22 correct?

23 ATTORNEY NALL: Objection. Form.
24 Scope.

1 A. That's correct.

2 Q. Is the system sealed?

3 A. Not when the valve is open, no.

4 Q. Okay.

5 ATTORNEY ROSATO: No further questions.

6 ATTORNEY NALL: Let's go off the
7 record.

8 CERTIFIED STENOGRAPHER: Off the
9 stenographic record at 12:07 p.m.

10 - - -

11 (Whereupon, a short recess was
12 taken.)

13 - - -

14 CERTIFIED STENOGRAPHER: Back on the
15 stenographic record at 12:12 p.m.

16

17 EXAMINATION BY ATTORNEY NALL:

18 BY ATTORNEY NALL:

19 Q. During the break, before your
20 counsel asked you questions, did you discuss
21 anything with counsel?

22 A. During this previous break?

23 Q. No. The one before that, before he
24 asked you questions?

1 A. Not that I recall.

2 Q. Did you go over any of the
3 questions he asked before he asked them?

4 A. I -- not at that time.

5 Q. Do you still have Exhibit 1003 in
6 front of you?

7 A. I do.

8 Q. Would you please turn to Figure 2.

9 A. I'm there.

10 Q. Exhibit 3, Figure 2, vacuum pump
11 has an on-off valve; correct?

12 A. That's correct.

13 Q. What is your understanding of that
14 on-off valve?

15 A. It's the on-off valve that allows
16 the system to release through the valve into
17 the vacuum pump.

18 Q. What happens when it's on?

19 A. Nothing. Well, I mean, when it's
20 turned on, you can actually push air out of
21 the system.

22 Q. What happens --

23 A. I should say gas out of the system.

24 Q. And what happens when the vacuum

1 on-off valve is turned off?

2 A. You would not be able to push
3 anything through the valve.

4 Q. Earlier you said that Exhibit 1003
5 says that the vacuum valve is opened when the
6 rod is being pushed down; right?

7 A. I said to neutralize with pressure
8 differences, when the tube is moved --

9 - - -

10 (Clarification requested by the
11 stenographer.)

12 - - -

13 THE WITNESS: I'm sorry. I'm sorry.

14 A. To neutralize with pressure
15 differences, when the tube is moved, an on-off
16 valve with connection to the filtered air
17 outlet is placed in the upper chamber.

18 Q. So Exhibit 1003 says that: The
19 vacuum valve is used when the rod is being
20 moved; is that right?

21 A. It says: To neutralize pressure
22 differences when the tube is moved. There is
23 no mention of a rod.

24 Q. Exhibit 1003 says that: The vacuum

1 valve is used when the tube is being moved; is
2 that right?

3 A. It's -- no. It says: To
4 neutralize pressure differences when the tube
5 is moved, an on-off valve in connection to the
6 filtered air outlet is placed in the chamber.
7 There is no indication of on or off.

8 Q. Do you know whether the valve would
9 be on or off while the tube is being moved?

10 A. I'd have to speculate. I don't
11 know.

12 Q. There is no other discussion of
13 using the vacuum valve in the Exhibit 1003; is
14 there?

15 A. Not that I recall.

16 ATTORNEY NALL: I pass the witness with
17 respect to the '603 patent.

18 ATTORNEY ROSATO: No further questions.

19 ATTORNEY NALL: Let's go off the record
20 and eat lunch.

21 ATTORNEY ROSATO: Sounds good to me.

22 CERTIFIED STENOGRAPHER: Off the
23 stenographic record at 12:16 p.m.

24 - - -

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(Whereupon, a luncheon recess is
taken at 12:16 p.m.)

* * * * *

1 A F T E R N O O N S E S S I O N

2 (12:52 p.m.)

3 CERTIFIED STENOGRAPHER: On the
4 stenographic record at 12:52 p.m.

5

6 EXAMINATION BY ATTORNEY HEINTZ:

7 BY ATTORNEY HEINTZ:

8 Q. Welcome back, Mr. Conroy.

9 A. Thank you.

10 Q. Sir, my name is James Heintz. I go
11 by Jim, and I'm going to be talking to you
12 about the PGR for the '437 patent, okay?

13 A. Okay.

14 Q. All right.

15 Earlier, Ms. Nall gave you a number
16 of instructions. Those instructions will be
17 in effect for this deposition also, okay?

18 A. Sounds good.

19 Q. All right.

20 Sir, I know this is going to be
21 hard for you to read, but I'm going to hand
22 you what's been marked as Exhibit 1001, which
23 is a copy of U.S. Patent Number 12249437.

24 I'll ask you if you recognize that?

1 A. I do. Thank you.

2 Q. Okay. And I'll just refer to that
3 as we go forward today as the '437 patent.

4 Is that all right?

5 A. That's fair.

6 Q. Okay.

7 So I'll ask you to turn in the '437
8 patent to Column 1. That's the part right
9 after the figures.

10 Do you have it, sir?

11 A. I do.

12 Q. Okay. You've read this patent
13 previously; correct?

14 A. I have.

15 Q. Were you able to understand
16 everything in the patent?

17 A. I was.

18 Q. Okay. So in Column 1 at about
19 Line 17, the word -- the heading "Field"
20 appears.

21 Do you see that?

22 A. Yes.

23 Q. Okay. Starting at Line 20 at
24 Column 1, the '437 patent reads: The present

invention relates to a single-chamber diffusion generator, open parentheses, assembly, close parentheses, comma, assemblies and method for obtaining a container comprising ^{212}Pb on the walls obtained from a ^{212}Pb precursor isotope source.

Do you see that?

A. I do.

Q. Do you dispute that that is an accurate identification of the field of the '437 patent?

A. It's exactly as read in the claim.

Q. Okay. And by "claim," to what are you referring?

A. I'm sorry, exactly as read in the document.

Q. Okay. So I take it that you do not dispute that that statement in the patent at Column 1, Lines 20 through 24 is an accurate identification of the field of the '437 patent?

A. I do not dispute.

Q. All right. Thank you, sir.

- - -

(Whereupon, document previously
marked Exhibit 2002, is received and marked as
Exhibit 2002 for identification.)

- - -

BY ATTORNEY HEINTZ:

Q. I'm going to hand you what's been
previously marked as Exhibit 2002 in
PGR2025-00040 and what's entitled:
Declaration of Charles Conroy.

A. Thank you.

Q. Mr. Conroy, when you've had the
chance to look through it, my question is
going to be: Is that your declaration in the
PGR concerning the '437 patent that we just
looked at?

A. I believe it is.

Q. Okay. And on the 41st page, is
that your digital signature?

A. It is.

Q. All right.

Sir, I'm going to ask you to turn
to Paragraph 28 of your declaration.

That's on the page that's labeled
13.

1 A. I'm there.

2 Q. All right.

3 There you are discussing the level
4 of skill in the art; correct?

5 A. That's correct.

6 Q. And within Paragraph 28, there are
7 several references to the word "field," one of
8 them, for instance, is on the very last line
9 on Page 13. Actually, two of them are on the
10 very last line of Page 13.

11 A. Okay.

12 Q. Okay. And in that paragraph, there
13 are statements to the effect that: When you
14 determine the level of ordinary skill in the
15 art that someone would have had at the time
16 the claimed invention was made, one should
17 consider in the first instance the levels of
18 education and experience of persons working in
19 the field.

20 Do you see that?

21 A. I do.

22 Q. In that statement about the field,
23 were you referring to the field of the '437
24 patent that we just looked at at Column 1,

1 Lines 20 to 24?

2 A. I was not.

3 Q. Okay. Is that because 28 is sort
4 of a general statement?

5 A. Yes.

6 Q. Okay. Do you consider yourself one
7 of skill in the art of the field of the '437
8 patent?

9 ATTORNEY ROSATO: Objection to form.

10 A. I did not consider the two words
11 "field" and "field" as they were used within
12 the documents. The two references to the word
13 "field" can be the same.

14 Q. Okay. So we discussed earlier that
15 the '437 patent defines a field as relating to
16 a single-chamber diffusion generator,
17 assemblies and method for obtaining a
18 container comprising ^{212}Pb , which is lead, on
19 the wall, so obtained from a ^{212}Pb precursor
20 isotope source; right?

21 ATTORNEY ROSATO: Objection to form.
22 Misstates.

23 A. In the field within the document,
24 it does read: The present invention relates

1 to a single-chamber diffusion generator
2 assembly assembled and method for obtaining a
3 container comprising Lead-212 on the walls
4 obtained from a Lead-212 precursor isotope
5 source.

6 Q. And earlier you testified that you
7 did not dispute that that is the field of the
8 '437 patent; correct?

9 ATTORNEY ROSATO: Objection to form.

10 A. That's correct.

11 Q. Okay. Do you consider yourself to
12 be a person of ordinary skill in the art in
13 that field?

14 ATTORNEY ROSATO: I'm going to object
15 to form.

16 A. I would.

17 Q. And what do you contend qualifies
18 you as a person of ordinary skill in the art
19 in that field as defined at Column 1, Lines 20
20 to 24 of the '437 patent?

21 A. I think to understand the field as
22 defined, you'd have to understand
23 radioisotopes, how they work essentially, and
24 how the generator systems for radioisotopes

1 work and are produced within generator
2 systems.

3 Q. Does that complete your answer?

4 A. Yes.

5 Q. Okay. Does that field as defined
6 in Column 1, Lines 20 to 24 of the '437 patent
7 include generators that would be commonly
8 referred to as liquid generators?

9 ATTORNEY ROSATO: Objection to form.

10 A. I'm sorry, can you ask that again?

11 Q. Sure.

12 Does that field as defined at
13 Column 1, Lines 20 to 24 of the '437 patent
14 include generators that would commonly be
15 referred to as liquid generators?

16 ATTORNEY ROSATO: The same objection.

17 A. I'm not sure.

18 Q. So Lines 20 to 21 of Column 1 talk
19 about a single-chamber diffusion generator.
20 Is a liquid generator a diffusion generator?

21 A. It is not.

22 Q. So if the field of the invention of
23 the '437 patent is limited to a single-chamber
24 diffusion generator, does that include liquid

1 generators?

2 ATTORNEY ROSATO: Objection to form.

3 Misstates the document.

4 A. Liquid generators and diffusion
5 generators are different.

6 Q. Okay. Going back to your
7 declaration, and this is, again, Exhibit 2002,
8 in Paragraph 28 near the bottom of Page 13 on
9 the last line it says: The types of problems
10 encountered in the field.

11 Do you see that?

12 A. I do.

13 Q. What kinds of problems were
14 encountered in the field of the '437 patent as
15 defined at Column 1, Lines 20 to 24?

16 ATTORNEY ROSATO: I'm just going to
17 state my objection. Let me get those out.
18 The same objection to the field comment, form,
19 and misstates the document.

20 A. We certainly run into problems with
21 generators on a daily basis and difficulty
22 with everything that runs from shipping and
23 receiving, to elution and product and being
24 able to obtain product.

1 Q. Sir, you mentioned problems about
2 elution. Does a single-chamber diffusion
3 generator involve elution?

4 A. It involves removing the progeny
5 isotopes from the container vial using an
6 elution methodology, yes, or a liquid
7 methodology, which could be at times an
8 elution.

9 Q. How are isotopes removed from a
10 single-chamber diffusion generator typically?

11 ATTORNEY ROSATO: Objection to form and
12 foundation.

13 A. I don't know that there is a
14 typical methodology.

15 Q. What methodologies are you aware
16 of?

17 A. Well, there is several. They vary
18 slightly, but I'd say in a general sense, it
19 is similar to here, whereas the collection
20 surface will be somehow -- the progeny isotope
21 will be removed from the collection surface
22 either mechanically or through a scientific
23 process, which can include simply washing, for
24 example, the walls of the container to collect

1 that and purifies it in some way.

2 Q. Is the washing example that you
3 mentioned an example of a mechanical process?

4 A. It does have some mechanic aspect
5 to it.

6 Q. Your answer to one of my earlier
7 questions was: The progeny isotope will be
8 removed from the collection surface either
9 mechanically or through a scientific process,
10 which can include simply washing.

11 So I'm trying to figure out if this
12 simple washing is the scientific process or
13 the mechanical process?

14 ATTORNEY ROSATO: Objection. Form.

15 A. It can certainly be a bit of both
16 in the sense that someone has to use --
17 physically do that process using, in this
18 case, some sort of liquid to remove the vial.
19 So you're spraying the sides of the container
20 vial for lack of a better phraseology.

21 Q. And that's a way you would get the
22 radioactive isotopes out of the collection
23 chamber; correct?

24 A. That's correct.

1 Q. Is it proper to refer to that
2 process as elution?

3 ATTORNEY ROSATO: Object to form, both
4 of those.

5 You've got to let me get my objections
6 out, please.

7 A. Possible, depending on how -- how
8 it was done.

9 Q. Give me an example of how washing
10 the radioactive isotope off surfaces of a
11 collection chamber would involve elution?

12 A. If you had a collection material
13 vial that had a large degree or a large amount
14 of the product you wanted to use to wash the
15 chamber and on the other end you had a
16 receiving vial, you could physically -- the
17 receiving vial being an evacuated vial, for
18 example, and some tubing that ran between the
19 two, you could run from -- you could pull the
20 collection material across the top of the
21 collection vial and into the receiving vial,
22 and that would be an elution.

23 Q. And that's typically done for
24 liquid generators; right?

1 ATTORNEY ROSATO: Object. Objection to
2 form, foundation, and this is going beyond the
3 scope of direct testimony.

4 A. For the largest commercial
5 generators that are used today, that is the
6 typical methodology.

7 Q. Okay. So what was the typical
8 methodology?

9 ATTORNEY ROSATO: The same objection.

10 A. Liquid elution.

11 Q. Liquid elution.

12 So that methodology of using an
13 evacuated container and drawing the material
14 out of a collection chamber, that's used for
15 liquid generators; correct?

16 ATTORNEY ROSATO: Objection.

17 Q. Liquid radioisotope generators?

18 ATTORNEY ROSATO: Objection to form.
19 Foundation and scope.

20 A. In that situation that you're
21 discussing, you're actually pulling the liquid
22 over a salad with the use of an evacuated
23 chamber, but using -- when you're talking
24 about a liquid generator, it's usually that

1 you're using a liquid to pull out the progeny
2 product.

3 Q. Correct. When we're talking about
4 a single-chamber diffusion generator, are we
5 talking about using a liquid to separate the
6 desired radioisotope from its source?

7 ATTORNEY ROSATO: Objection to form,
8 foundation and scope.

9 A. Yes, as it says in the patent
10 itself: In one or more of the embodiments of
11 the invention, the inner walls of the
12 container are coated. The coating may --

13 - - -

14 (Clarification requested by the
15 stenographer.)

16 - - -

17 THE WITNESS: I'm sorry.

18 A. Column 4, Line 24, in one or more
19 of the embodiments of the invention, the inner
20 walls of the chamber are coated. The coating
21 may be a foam or salt or other suitable
22 material in the inner walls.

23 - - -

24 (Clarification requested by the

stenographer.)

- - -

A. One or more of the embodiments of the invention on the inner walls of the container are coated with a compound that comprises a chelator, which is complex with Lead-212. In one or more embodiments of the invention, the inner walls of the chamber are coated with chelator, which has THC or variant thereof.

- - -

(Clarification requested by the stenographer.)

- - -

THE WITNESS: Correct. I'm sorry, TM -- sorry, TCMC or a variant thereof.

A. And one or more of the embodiments of the invention that contain or comprises an aqueous or an oil solution.

Q. Does that complete your answer?

A. I'm sorry?

Q. Does that complete your answer?

A. I think we can go through and find where it was, if you want to go through and

1 find how that's washed off.

2 Q. If your point is it can just be
3 washed off when there is --

4 A. It can just be washed off.

5 Q. That's fine. Okay.

6 So that type of elution is not --
7 let me withdraw that.

8 That procedure that you just
9 discussed is not employed in a liquid
10 generator that involves chromatography;
11 correct?

12 ATTORNEY ROSATO: Objection to form.
13 Foundation and scope.

14 A. That's correct.

15 Q. Okay. How many -- let me withdraw
16 that.

17 I believe you testified earlier
18 that you're familiar with the term "emanation
19 generator"; correct?

20 A. Yes.

21 Q. Okay. How many emanation
22 generators have you physically used?

23 A. I don't know that I have actually
24 handled any myself.

1 Q. And if you haven't handled any
2 yourself, that would mean you would have no
3 personal experience in the kind of processes
4 you just described in Column 4, starting at
5 Line -- I think it was Line 9 where you
6 started reading, but anything in Column 4 is
7 not something you have any personal experience
8 with; right?

9 ATTORNEY ROSATO: Object to the form.

10 A. I've not completed that physical
11 act myself.

12 Q. Okay. Have you watched it be
13 performed?

14 A. I have. I've seen -- I've -- I
15 have witnessed that.

16 Q. In which context did you witness
17 it?

18 A. The -- when we've had lead
19 generators displayed to us or operated for us.

20 Q. When you say "we" and "us," to whom
21 are you referring?

22 A. My team at Nucleus RadioPharma.

23 Q. Okay. So if I'm understanding
24 correctly, you've seen somebody else perform

1 those kinds of processes with an emanation
2 generator; correct?

3 A. That's correct.

4 Q. Okay. Do you remember which
5 emanation generator that was?

6 A. I don't.

7 Q. Is it also correct that an
8 emanation generator is referred to as a
9 diffusion generator?

10 ATTORNEY ROSATO: Objection to form.

11 A. I believe I've seen that before,
12 but I'm not sure that that's -- that's not the
13 normal wording.

14 Q. Well, when you say "that's not the
15 normal wording," what's not the normal wording
16 of what?

17 A. A diffusion generator.

18 Q. Okay. So you're saying that it's
19 not typical to refer to a diffusion generator
20 as an emanation generator or vice versa?

21 A. I've heard emanation generator --

22 ATTORNEY ROSATO: Object to form.
23 Foundation. Scope.

24 A. I believe the term "emanation

1 generator" to be more prevalent.

2 Q. Okay. What I'm trying to figure
3 out is: Do you believe there is a difference
4 between an emanation generator and a diffusion
5 generator?

6 ATTORNEY ROSATO: Objection to form,
7 foundation and scope.

8 This is getting completely untethered
9 to the case.

10 ATTORNEY HEINTZ: Counsel, those
11 speaking objections are not proper.

12 A. I'd have to have examples of what
13 an emanation generator and a diffusion
14 generator are, in what context, to be able to
15 answer that for you.

16 Q. Okay. What do you think a
17 diffusion generator is in the context of the
18 field of the '437 patent discussed at
19 Column 1, Lines 20 to 24?

20 ATTORNEY ROSATO: Objection to form.
21 Let's -- you can answer or take a break and
22 stay on the record because I want to address
23 this without the witness in the room.

24 ATTORNEY HEINTZ: Counsel --

1 A. I don't see any mention of the
2 field where it says the diffusion generator
3 assemblies versus an emanation generator.

4 Q. You see -- I'm sorry, is that your
5 answer --

6 ATTORNEY ROSATO: Let's -- we can stay
7 on the record and ask the witness to step out
8 of the room.

9 ATTORNEY HEINTZ: Well, let's complete
10 the answer first.

11 Q. Is that the end of your answer or
12 do you have more to say?

13 A. That's the end of my answer.

14 Q. Okay.

15 (The witness leaves the deposition
16 room.)

17 ATTORNEY HEINTZ: What's the issue,
18 counsel?

19 ATTORNEY ROSATO: I'm just getting
20 concerned because this is -- seems to have
21 gone beyond just probing to the witness'
22 background and expertise, and I'm getting the
23 sense you guys are fishing for some sort of
24 prior art case that is not existent in the

1 record right now. So I just don't see this
2 tied to the record in any way, his declaration
3 in any way. I have concerns it's well outside
4 the scope of not only this case, but his
5 direct testimony.

6 ATTORNEY HEINTZ: Sure.

7 So his direct testimony talks about
8 what a level of ordinary skill in the art is
9 and talks about the word "field." That's in
10 Paragraph 28.

11 The patent defines the field or at
12 least discusses the field for the '437 patent.
13 So these questions are directly connected to
14 what his understanding of a person of ordinary
15 skill in the art is and what his
16 qualifications are.

17 ATTORNEY ROSATO: It's beyond that.
18 So, first of all, you did identify one of the
19 problems with your questions. You keep saying
20 that the patent defines the field, which is an
21 incorrect characterization. It discusses some
22 aspects of the field. So that's a trick
23 question that keeps coming up.

24 The other is, you know, just -- all of

1 these cases involve the perspective of a
2 person of ordinary skill in the art that has
3 been addressed by your expert and defined by
4 your expert and applied by Mr. Conroy. Now,
5 that does not give you a license to go explore
6 the entire universe to try to come up with new
7 prior art arguments, and that's the concern we
8 have.

9 ATTORNEY HEINTZ: Okay. So nothing I
10 am asking about is any attempt to identify
11 some new piece of prior art, and it makes no
12 sense that I'd been doing that because the
13 petition defines what the prior art we're
14 relying on is. So if I'm -- you know, I
15 stated my position. You've stated yours.
16 Let's not waste any more time. Let's keep
17 going, okay.

18 ATTORNEY ROSATO: Sure. We can keep
19 going, but I'm going to be sensitive to this
20 going beyond the scope of the case and the
21 direct testimony.

22 ATTORNEY HEINTZ: Okay.

23 ATTORNEY ROSATO: So I'll keep noting
24 my objections, but we understand each other's

1 concerns.

2 ATTORNEY HEINTZ: Very good.

3 ATTORNEY ROSATO: Thank you.

4 (The witness comes back into the
5 deposition room.)

6 ATTORNEY HEINTZ: Okay.

7 BY ATTORNEY HEINTZ:

8 Q. Mr. Conroy, welcome back.

9 Sir, before you left, I was trying
10 to explore with you whether you think there is
11 a difference between the term "diffusion
12 generator" and "emanation generator." So can
13 you tell me: Do you believe that those terms
14 refer to different things or not?

15 ATTORNEY ROSATO: Objection to form,
16 foundation and scope.

17 A. I'd have to see context, but
18 essentially they would be very similar, not
19 the same.

20 Q. Okay. And so to put a finer point
21 on my question, I suppose: In the context of
22 the '437 patent, do you believe there is a
23 difference in terminology between a diffusion
24 generator and an emanation generator?

1 ATTORNEY ROSATO: Objection to form,
2 foundation and scope.

3 A. I'd have to go back and look at the
4 definition again -- I'd have to step away from
5 this for a bit and look at the definition
6 again between diffusion and emanation and see
7 what the difference is.

8 Q. And just sitting here today, you
9 are not able to identify any difference; are
10 you?

11 ATTORNEY ROSATO: Objection to form,
12 foundation and scope, and for asking the same
13 question that was already answered.

14 A. Essentially emanation and diffusion
15 are similar words, synonyms, but there is
16 obviously a difference between the two or we
17 wouldn't have two words.

18 Q. So it's your belief that any time
19 two words are used, they must be referring to
20 different things; is that right?

21 ATTORNEY ROSATO: Objection to form.
22 Foundation. Scope. Misstates.

23 A. No, I don't believe any time you
24 use two words, but I believe there is a

1 difference between diffusion and emanation,
2 but I'd have to step away to tell you what
3 that difference is.

4 Q. Okay. With respect to the
5 single-chamber diffusion generators discussed
6 in Column 1 at Lines 20 to 21 of the '437
7 patent, can you name some of the leading
8 researchers in that field?

9 ATTORNEY ROSATO: Objection to form.
10 Foundation. Scope.

11 A. Sure. We could start to pull up
12 sources and read those through, but I'm not
13 going to -- I'm not going to start naming
14 names for fear that I would offend others.

15 Q. Are you able to name any names?

16 A. Yes.

17 ATTORNEY ROSATO: Objection to form.
18 Foundation. Scope. This is outside the
19 direct testimony.

20 Q. Can you give me any of those names?

21 ATTORNEY ROSATO: The same objection.

22 A. I'm not going to begin listing
23 names.

24 Q. Okay. And that's because you're

1 afraid of offending somebody by leaving them
2 off; is that right?

3 A. That's certainly a portion of it.

4 Q. What's the other portion of it?

5 A. I don't want to start naming -- I
6 don't want to start giving a list of names. I
7 don't understand the value.

8 Q. But you're telling me you're able
9 to give names if -- right now?

10 ATTORNEY ROSATO: You're badgering the
11 witness now. He's answered your question.

12 ATTORNEY HEINTZ: Actually, counsel, he
13 has not answered the question.

14 ATTORNEY ROSATO: I'm going to object
15 to the question as form. It's outside the
16 scope of direct. It's already been asked and
17 addressed.

18 ATTORNEY HEINTZ: And for the record,
19 it hasn't been addressed. It hasn't been
20 answered. What he's told me is he's not going
21 to do it.

22 Telling me he's not going to do it is
23 not an answer to the question, and I don't
24 believe the witness is allowed to decide what

1 questions he's going to answer and which
2 questions he's not.

3 I am attempting to explore his
4 knowledge in this art. If he can't tell me
5 the name of any researcher in the field, well,
6 that bears on his credibility.

7 BY ATTORNEY HEINTZ:

8 Q. So I'm going to give you one more
9 chance, Mr. Conroy: Can you answer my
10 question, can you name any researchers in the
11 field of single-chamber diffusion generators?
12 Yes or no?

13 ATTORNEY ROSATO: I'm going to object
14 to the form and respond to the last speech and
15 he didn't tell you that he can't name people.

16 ATTORNEY HEINTZ: That's right. He
17 said he was not going to, and I want to know
18 if he can do it.

19 Q. And if so, give me some names.
20 Will you answer the question? Yes or no?

21 ATTORNEY ROSATO: Object to the form.
22 He answered your question.

23 A. I'm not listing names.

24 Q. Okay. Now, in Paragraph 28 of your

1 declaration, that's, again, Exhibit 2002, you
2 say that: A person of ordinary skill in the
3 art is a hypothetical person to whom one could
4 assign a routine task with reasonable
5 confidence that the task would be successfully
6 carried out. Correct?

7 A. That's correct.

8 Q. Okay. With respect to a
9 single-chamber diffusion generator as
10 discussed in the '437 patent, what would be a
11 routine task that a person of ordinary skill
12 in the art could be asked to carry out?

13 ATTORNEY ROSATO: Object to form.

14 A. The example, an elution of a
15 generator or the removal of the progeny
16 isotope from the generator.

17 Q. Okay. Can you name any other
18 routine tasks that a person of ordinary skill
19 in the art would be expected to carry out for
20 single-chamber diffusion generators?

21 ATTORNEY ROSATO: Object to form.

22 A. Likely the process to move the --
23 to have the generator perform its stated
24 functionality.

1 Q. So when you answered earlier about
2 eluting that single-chamber diffusion
3 generator, what you were talking about is
4 removing the progeny isotope from the
5 collection chamber; correct?

6 ATTORNEY ROSATO: Objection to form and
7 foundation.

8 A. That would be an example, yes.

9 Q. Okay. And then your second example
10 was essentially using the generator for its
11 intended purpose; is that fair?

12 A. Yes.

13 Q. Okay. Those are both tasks that a
14 user of a generator performs; correct?

15 ATTORNEY ROSATO: Objection to form and
16 foundation.

17 A. Yes.

18 Q. Okay. And, for instance, a user,
19 such as a radiopharmacist, would do that on a
20 daily basis; correct?

21 ATTORNEY ROSATO: Objection to form.

22 A. Yes.

23 Q. Okay. What other tasks are there
24 that would be assigned to a person of ordinary

1 skill in the art of single-chamber diffusion
2 generators?

3 ATTORNEY ROSATO: Objection to form and
4 scope.

5 A. Preparing the generator for elution
6 depending on the type of generator.

7 Q. Would that be true for
8 single-chamber diffusion generators?

9 A. Yes.

10 Q. Okay. And again, the diffusion
11 you're talking about -- sorry, the elution
12 you're talking about is the removal of the
13 progeny isotopes from the collection chamber;
14 right?

15 ATTORNEY ROSATO: Objection to form.

16 Q. In the context of a single-chamber
17 diffusion generator?

18 ATTORNEY ROSATO: Objection to form,
19 foundation and scope.

20 A. Sorry, can you ask the question
21 again, please?

22 Q. Sure.

23 The elution that you mentioned in
24 your last response was the removal of progeny

1 isotopes from the collection chamber of a
2 single-chamber diffusion generator; correct?

3 A. Yes.

4 Q. Okay.

5 ATTORNEY ROSATO: Objection to form.

6 Q. And you mentioned preparing the
7 generator for that elution; correct?

8 A. That's correct.

9 Q. What would you need to do to
10 prepare a single-chamber diffusion generator
11 for the type of elution you just mentioned in
12 your response?

13 ATTORNEY ROSATO: Objection to form,
14 foundation and scope.

15 A. Depends on the generator.

16 Q. Depends on the particular type of
17 single-chamber diffusion generator?

18 A. That's correct.

19 Q. Okay. Give me an example of what
20 type of single-chamber diffusion generator and
21 what tasks you would perform to prepare that
22 generator for the elution you mentioned?

23 ATTORNEY ROSATO: Object to form,
24 foundation and scope.

1 A. So if you look at Page 18 of my
2 declaration, Figures 3A and 3B.

3 Q. Okay. Sir, I'm there. Thank you.

4 A. And Figure 3A, that generator is
5 not ready to perform. It is not sealed. It
6 would need to move from 3A to 3B to actually
7 be able to perform its functionality.

8 Q. So the task would be screwing on
9 the cap with the syringe and a strip onto the
10 bottle; is that right?

11 A. That's correct.

12 Q. Okay. Can you give me any other
13 examples of the kinds of tasks that one of
14 ordinary skill in the art would be asked to
15 perform for a single-chamber diffusion
16 generator?

17 ATTORNEY ROSATO: Object to the form,
18 foundation and scope.

19 A. You may have to place the isotope
20 source onto the holding source. You may have
21 to prepare the vial after it's been sealed for
22 removal of the progeny isotopes. You have to
23 remove them.

24 Q. I'm sorry, I didn't catch that last

1 word.

2 A. You have to then perform the
3 removal process.

4 Q. Which is the elution process --

5 A. Correct.

6 Q. -- you've been discussing. Okay.

7 All right.

8 Can you give me any other examples?

9 A. Pretty simple setup, sir.

10 Q. Agreed.

11 And those are all tasks that a user
12 of a generator would be performing; correct?

13 ATTORNEY ROSATO: Objection to form.
14 Foundation.

15 A. That's all the tasks that need to
16 be done, sir.

17 Q. All the tasks that need to be done
18 to use a single-chamber diffusion generator
19 for the purpose of producing isotopes;
20 correct?

21 ATTORNEY ROSATO: Object to form.

22 A. Correct.

23 Q. Okay. Let's turn in the '437
24 patent to Figure 4. All right. Okay.

1 So in Figure 4 actually includes a
2 Figure 4A and a 4B; correct?

3 A. That's correct.

4 Q. Okay. Are Figures 4A and 4B the
5 same generator in a different configuration?

6 A. They appear to be.

7 Q. Okay. So is the generator in
8 Figure 4 a single-chamber diffusion generator?

9 A. It is.

10 Q. Okay. Now, with respect to
11 Figure 4A, the gas and liquid-tight lid,
12 slash, valve is in the closed position;
13 correct?

14 A. In Figure 4A --

15 ATTORNEY ROSATO: Objection to form.

16 THE WITNESS: Sorry.

17 A. In Figure 4A, the gas and
18 liquid-tight -- I'm sorry, the gas and
19 liquid-tight lid valve, though not indicated
20 on this particular figure, is often labeled as
21 being in the closed position.

22 Q. Okay. And what is your
23 understanding of what the closed position is
24 with respect to Figure 4A?

1 A. The closed position with respect to
2 Figure 4A is when the source material is not
3 exposed to the chamber, to the collection
4 chamber.

5 Q. Okay. And where is the source
6 material in Figure 4A?

7 A. Within the chamber with the
8 gas-tight O-ring seal.

9 Q. Okay. So let's just get some
10 terminology down.

11 Figure 4B includes the word
12 "piston."

13 Do you see that?

14 A. Yes.

15 Q. Okay. What's the piston in
16 Figure 4B?

17 A. The piston is the -- the handle, if
18 you will, that attaches to the rod to be able
19 to physically manipulate to push the rod down
20 into the -- from the closed to opened
21 position.

22 Q. And by "rod," we're referring to
23 that vertically-oriented structure beneath the
24 handle of the piston?

1 A. I'm referring to what in Figure 4B
2 is labeled "source area."

3 Q. Fantastic. Okay. So we can call
4 that the rod.

5 So the rod is where the source is
6 located; correct?

7 A. Yes.

8 Q. Okay. Earlier, you mentioned a
9 collection chamber. Where is the collection
10 chamber in Figures 4A and 4B?

11 ATTORNEY ROSATO: Object to form.

12 A. It would be the walls of the
13 collector vial. The inner surface of the
14 collector vial.

15 Q. Okay. So in Figure 4A, is the
16 source in the same -- let me strike that.

17 In Figure 4A, the rod is within a
18 chamber; correct?

19 A. Yes.

20 ATTORNEY ROSATO: Object to form.

21 THE WITNESS: Sorry.

22 ATTORNEY HEINTZ: Yeah, let me rephrase
23 that.

24

1 BY ATTORNEY HEINTZ:

2 Q. At least part of the rod is within
3 what's been labeled "chamber with gas-tight
4 O-ring seal"; correct?

5 A. Yes.

6 Q. Okay. In Figure 4A, is the chamber
7 in fluid communication with the collection
8 chamber?

9 A. In Figure 4A, the -- sorry, can you
10 rephrase that?

11 Q. Sure.

12 In Figure 4A, is the part of the
13 rod in which the chamber with gas-tight O-ring
14 seal is located in fluid communication with
15 the collection chamber?

16 ATTORNEY ROSATO: Object to form.

17 A. No. The rod is not in fluid
18 connection with the collector vial or the
19 chamber.

20 Q. So is -- let me strike that.

21 So the chamber with gas-tight
22 O-ring seal and the collection chamber are not
23 in fluid communication in Figure 4A; correct?

24 ATTORNEY ROSATO: Objection to form.

1 A. In Figure 4A, the chamber is not --
2 is not fluidly coupled to the collection vial.

3 Q. Okay. And just to be clear, by
4 "chamber," we're talking about the part that's
5 labeled in Figure 4B as chamber with gas-tight
6 O-ring seal; correct?

7 A. I'm sorry, let me restate that.

8 Q. All right.

9 A. In Figure 4A, the source area is
10 not fluidly connected to the collector vial.

11 Q. Sure.

12 It's not just the source area
13 though. It's also the whole part that's
14 labeled "chamber with gas-tight O-ring seal";
15 correct?

16 ATTORNEY ROSATO: Object to form.

17 A. No. The chamber I believe contains
18 the rod. The rod -- in Figure 4A, the rod,
19 because of the gas-tight seal, would actually
20 be in contact with the interior of just the
21 chamber, but not the collection vial.

22 Q. Yeah. I thought we're trying to
23 say the same thing, but maybe we're --
24 terminology is getting mixed up.

1 So if I refer to the tube in which
2 the rod sits, okay, you can see that's labeled
3 "chamber with gas-tight O-ring seal"?

4 A. Yes.

5 Q. Correct. Okay.

6 In Figure 4A, with the gas and
7 liquid-tight lid, slash, valve in the position
8 shown there, that chamber with gas-tight
9 O-ring seal is not in fluid communication with
10 the collector volume defined by the collector
11 vial?

12 ATTORNEY ROSATO: Object to form.

13 A. In Figure 4A, the source area as
14 sealed is not in fluid connection to the
15 collector vial. I'm sorry, I just want to be
16 very specific on what you're asking me -- what
17 I'm answering.

18 Q. I understand what you're saying,
19 the source area. The source area is the rod;
20 right?

21 A. Or what is disposed on the rod.

22 Q. What is disposed on the rod, but in
23 Figure 4A, there is a volume in which that
24 source area is within, and that's what's

1 labeled "chamber with gas-tight O-ring seal."

2 In other words, that tube at the
3 top is a chamber, and when the gas and
4 liquid-tight lid, slash, vial was in the
5 position shown in Figure 4A, that whole
6 chamber is isolated from the collection
7 chamber; correct?

8 ATTORNEY ROSATO: Object to form.

9 A. No. The exterior of the chamber is
10 in -- is in -- is fluidly connected to the
11 collector vial. The interior of the chamber
12 is sealed.

13 Q. Okay. So part of the problem is
14 you're using the word "chamber," okay, and
15 there is two chambers that you've been
16 discussing. You talked about the collection
17 chamber --

18 A. Let's just call it the collection
19 vial then as labeled. Collector vial.

20 Q. Okay. Collector vial. Okay.

21 The point is the chamber with
22 gas-tight O-ring seal is not in fluid
23 communication with the collector vial. Would
24 you agree to that?

1 ATTORNEY ROSATO: Object to form.

2 Asked and answered.

3 A. I would -- I would not.

4 THE WITNESS: Can we take like a
5 two-minute break, please?

6 ATTORNEY HEINTZ: Sure.

7 Go off the record.

8 CERTIFIED STENOGRAPHER: Off the
9 stenographic record at 1:38 p.m.

10 - - -

11 (Whereupon, a short recess was
12 taken.)

13 - - -

14 CERTIFIED STENOGRAPHER: Back on the
15 stenographic record at 1:49 p.m.

16 ATTORNEY HEINTZ: All right.

17 BY ATTORNEY HEINTZ:

18 Q. Mr. Conroy, so I think my
19 colleagues here have apprised me of what the
20 confusion was. Let me see if I can make this
21 even simpler.

22 In Figure 4A, in the place where
23 the source is located, there is a volume
24 inside the chamber with gas-tight O-ring seal;

1 correct?

2 A. Yes.

3 Q. Okay. And the volume is bounded on
4 one end by the position of the gas and
5 liquid-tight lid, slash, valve; correct?

6 A. That's correct.

7 Q. And on the other end somewhere
8 there is an O-ring that goes around the rod
9 and seals that rod to the wall-- the inner
10 wall of the chamber; correct?

11 ATTORNEY ROSATO: Object to form.

12 A. There is a chamber with a gas-tight
13 O-ring seal.

14 Q. Well, in other words, in Figure 4B,
15 the source radiation and any gas that emanates
16 from it doesn't come out of the top of the
17 chamber with gas-tight O-ring seal; correct?

18 A. Initially incorrect.

19 Q. How so?

20 A. As soon as you break the seal by
21 pushing down on the piston, the gas that had
22 been emanated there before will fall into the
23 chamber.

24 Q. No, no, I'm talking about out the

1 top of the chamber. In other words, in
2 Figure 4B or even in Figure 4A for that
3 matter, there is -- in Figure 4A, there is no
4 radiation or isotopes escaping out of the
5 chamber with gas-tight O-ring seal, correct,
6 to the outside of the generator?

7 A. There should not be, that is
8 correct.

9 Q. So there is some kind of seal
10 between the rod and the walls of that chamber
11 with gas-tight O-ring seal; correct?

12 A. Correct.

13 Q. Okay. In Figure 4A, that volume is
14 separate from the volume of the interior of
15 the collector vial; correct?

16 A. That's correct.

17 Q. Okay. In other words, the two
18 volumes in those two chambers are not in fluid
19 communication; correct?

20 ATTORNEY ROSATO: Object to form.

21 A. In the closed position, that's
22 correct.

23 Q. Okay. So is it still accurate to
24 refer to the embodiment shown in Figures 4A

1 and 4B as a single-chamber diffusion generator
2 as discussed in Column 1, Lines 20 to 21 of
3 the '437 patent?

4 A. Give me a moment to just review
5 that.

6 Q. Sure.

7 A. I believe -- well, in fact, the
8 patent says under background: Assemblies for
9 preparing or producing Lead-212 -- as
10 previously described --

11 Q. Sorry, sir, can you tell us where
12 you're reading?

13 A. I'm sorry. Under background. Let
14 me just make sure that this is stating this --
15 oh, I'm sorry. I may be reading from
16 something that's not relevant to your
17 question. Let me restate.

18 It could be considered that there
19 are two chambers in this, this illustration.

20 Q. So is it or is it not a
21 single-chamber diffusion generator as that
22 term is used in the '437 patent?

23 A. Can you point me to where that is
24 in the '437 patent, please?

1 Q. Yeah, it's that discussion at
2 Column 1, Lines 20 to 24 under the heading
3 "field."

4 A. I believe under "field" they refer
5 to this -- to what's the chamber with the
6 gas-tight O-ring seal is at chamber and the
7 collector vial as a vial, not a chamber.

8 Q. So how many chambers are depicted
9 in the embodiment shown in Figure 4A?

10 A. By definition, one.

11 Q. Even though the two -- there are
12 two separate volumes that are not in fluid
13 communication in Figure 4A; correct?

14 A. That's correct.

15 Q. Okay. Thank you.

16 ATTORNEY HEINTZ: I'm going to ask to
17 have marked as Exhibit 5 a drawing bearing the
18 markings "ball valve" and "gate valve."

19 - - -

20 (Whereupon, drawing bearing the
21 markings "ball valve" and "gate valve", is
22 received and marked as Exhibit 5 for
23 identification.)

24 - - -

1 CERTIFIED STENOGRAPHER: Exhibit
2 Number 5.

3 ATTORNEY HEINTZ: Yes, sir.

4 ATTORNEY ROSATO: Is this a picture of
5 a pipe?

6 ATTORNEY HEINTZ: It is, and in
7 particular a copper pipe.

8 ATTORNEY ROSATO: Oh.

9 ATTORNEY HEINTZ: Okay.

10 ATTORNEY ROSATO: I'm going to object
11 to this. It's a new document. I'll reserve a
12 relevance objection. Outside the scope.

13 BY ATTORNEY HEINTZ:

14 Q. Sir, I take it you've never seen
15 this document before; correct?

16 A. I have not.

17 Q. Nonetheless, are you familiar with
18 the term "gate valve"?

19 A. I see it here. I've seen it
20 before.

21 Q. Okay. Same question with respect
22 to ball valve?

23 A. I see it on the document, sir.

24 Q. Okay. So let's take a look at the

1 gate valve figure.

2 You understand that on either side
3 of the light-brown colored body that's -- that
4 includes a red handle, there are two
5 darker-colored pipes?

6 ATTORNEY ROSATO: I'm going to -- just
7 going to object to not only the document, but
8 any questions related to this as lacking
9 relevance and outside the scope of direct
10 testimony.

11 Q. Would you agree with that, sir,
12 that what's shown -- or let me ask this:
13 Would you be willing to assume that what's
14 shown in this figure is a gate valve with two
15 pipes attached on either end?

16 ATTORNEY ROSATO: The same objection.
17 A standing objection to any questions on this
18 document.

19 A. It appears so, but I must tell you
20 I'm not a plumber and I don't really know the
21 functioning of these as they're shown.

22 Q. Okay. Do you know what? Let's
23 move on.

24 ATTORNEY HEINTZ: I'll have marked as

Exhibit -- as Conroy Exhibit 6, a single-page document bearing the legend "Inspired By Your Recent Views."

- - -

(Whereupon, single-page document bearing the legend "Inspired By Your Recent Views", is received and marked as Exhibit 6 for identification.)

- - -

CERTIFIED STENOGRAPHER: Exhibit Number 6.

A. I've not been at Home Depot lately.

BY ATTORNEY HEINTZ:

Q. All right.

ATTORNEY ROSATO: I'm going to just note an objection to this document. It's a new document. Looks like a printout from Home Depot's ordering website, I can't tell, but objection to scope, relevance, authenticity, and preserve all objections, and I'll note a standing objection to any questions relating to this document.

Q. Sir, you're familiar with the Home Depot; right?

1 A. I am familiar with the Home Depot.

2 Q. Generally speaking, it's a store
3 where you can purchase hardware and building
4 supplies for a home; is that correct?

5 A. That is correct.

6 Q. Okay. And I'll represent to you
7 that it is -- this is a printout from a
8 portion on a website. I'd ask you to look at
9 the black object on the far left side of
10 Exhibit 6.

11 What is that object, sir?

12 ATTORNEY ROSATO: Objection to form.
13 Foundation. Scope. Relevance.

14 A. The last object, I can't see fully.

15 Q. Okay. Can you see any of the
16 objects in Figure 6?

17 A. Yes.

18 Q. Which one can you see fully?

19 ATTORNEY ROSATO: The same objection,
20 standing objection to all of the questions
21 relating to this document.

22 A. I can see five objects that are
23 priced from \$7.45 to \$12.03.

24 Q. Okay. So with respect to the

1 object priced \$7.54, what is that object, sir?

2 A. That object is --

3 ATTORNEY ROSATO: The same objections.

4 THE WITNESS: I'm sorry.

5 A. That object is the national
6 multipurpose seal.

7 Q. Do you think that's an accurate
8 description of the object?

9 A. I have no idea.

10 ATTORNEY ROSATO: Objection.

11 THE WITNESS: Sorry.

12 ATTORNEY ROSATO: Objection to form.
13 Foundation. Scope. Relevance.

14 BY ATTORNEY HEINTZ:

15 Q. Do you have any reason to believe
16 that that's not an accurate description of the
17 object that's on sale for \$7.54?

18 A. I don't know why Home Depot would
19 try to be committing fraud upon me or anyone
20 else because it seems reasonable.

21 Q. Okay. Thank you, sir.

22 ATTORNEY HEINTZ: I've marked as
23 Exhibit 7, Conroy Exhibit 7 --

24 ATTORNEY ROSATO: What was the last

1 one? Was that 6?

2 ATTORNEY HEINTZ: 6 was the Home Depot
3 exhibit.

4 ATTORNEY ROSATO: Okay.

5 ATTORNEY HEINTZ: That's Exhibit 6;
6 right?

7 THE WITNESS: Yeah.

8 ATTORNEY HEINTZ: We'll have marked as
9 Exhibit 7.

10 - - -

11 (Whereupon, photo of a specimen
12 bottle, is received and marked as Exhibit 7
13 for identification.)

14 - - -

15 CERTIFIED STENOGRAPHER: Exhibit
16 Number 7.

17 THE WITNESS: Thank you, sir.

18 ATTORNEY ROSATO: I'll note an
19 objection to this document as a new exhibit
20 not addressed by Dr. Mirzadeh or anywhere in
21 the record. I'll preserve all objections,
22 including scope, relevance.

23 ATTORNEY HEINTZ: All right.

24

1 BY ATTORNEY HEINTZ:

2 Q. Sir, are you familiar with a
3 specimen bottle?

4 ATTORNEY ROSATO: I'll note both my
5 objection to the document, as well as a
6 standing objection to any questions relating
7 to this document as at least outside the scope
8 of direct testimony and not relevant to the
9 case.

10 A. I've seen several types of specimen
11 bottles in my life, yes.

12 Q. Okay. Do you recognize what's
13 shown in Figure 7 as the top portion of a
14 specimen bottle of a type you've seen?

15 ATTORNEY ROSATO: Same objections.

16 A. I don't know that that's the -- I
17 could not tell you -- I will not tell you
18 under oath that that is the top of a specimen
19 bottle that I have seen.

20 Q. Okay. Let's turn to Figure 5B of
21 the '437 patent.

22 A. Figure 5B of the '437 patent.
23 Okay.

24 Q. Okay. Do you recognize what's

1 shown in Figure 5B on the left-hand side as a
2 specimen bottle?

3 ATTORNEY ROSATO: Object to form.

4 A. All right. Within the document on
5 Column 14 under Line 44, they describe that as
6 100, 50, and 10 ml generator unit for --

7 - - -

8 (Clarification requested by the
9 stenographer.)

10 - - -

11 THE WITNESS: Let me start again.

12 A. Under -- where it says 5 --
13 Figure 5B on Line 45 it says: Figure 5B shows
14 the cap with quartz wool in the center for the
15 inner surface.

16 They refer to this as a generator
17 unit in Line 45.

18 Q. Okay. You've seen specimen bottles
19 though in your lifetime; correct?

20 A. Yes.

21 ATTORNEY ROSATO: Objection. Form.
22 Foundation.

23 Q. Have you seen specimen bottles that
24 look like what's depicted on the left-hand

1 side of Figure 5B?

2 A. On the left-hand side of Figure 5B?

3 Q. The glass object in the left-hand
4 side of Figure 5B?

5 A. I've seen collection containers
6 that look like that, yes.

7 Q. Would it be fair to call those
8 specimen bottles? Have you seen specimen
9 bottles that look like that?

10 ATTORNEY ROSATO: Object to form.

11 A. I honestly don't know how they're
12 cataloged.

13 Q. Okay.

14 A. Is there someplace within my
15 declaration or that document that refers to
16 specimen bottle?

17 Q. I'm just trying to figure out a
18 word that we can use, but let me ask the
19 question this way: There is a black object
20 shown at least in contact with the glass
21 object of Figure 5B.

22 Do you see that?

23 A. Yes, the document shows the cap
24 with the course wall as the center interface

1 in 5B.

2 Q. So I'm not talking about the cap
3 now. I'm talking about the black object
4 that's in contact with the glass object on the
5 left-hand side of Figure 5B.

6 A. Okay.

7 Q. Okay? What is that black object?

8 A. I don't believe it's described in
9 this document.

10 Q. Okay. What do you think it is?

11 A. I believe it's likely some type of
12 plastic or rubber material that allows a seal
13 to be created when the cap is placed upon the
14 bottle.

15 Q. Okay. In Exhibit 7, there is a --

16 A. Exhibit 7.

17 Q. Yeah, that's picture -- that's this
18 picture in front of you, okay. You can see a
19 translucent object that's in approximately the
20 same position as the black object on
21 Figure 5B?

22 A. Yes.

23 ATTORNEY ROSATO: Objection to form.
24 Scope.

1 Q. I want to try to -- let's take a
2 word that we can use to refer to the
3 translucent object in Figure 7. Would you
4 like to use the term "gasket"?

5 ATTORNEY ROSATO: Object to form.

6 Q. Seal?

7 A. For -- let's -- for the purpose of
8 this, I'm okay using gasket.

9 Q. Okay.

10 A. We can call it a -- we can call it
11 Zike bike if you'd like. I don't care.

12 Q. Okay. Let's call it a gasket.

13 A. That works for me.

14 Q. So the translucent object in
15 Figure 7 is a gasket. I'm going to hand you a
16 pen and ask you to mark that translucent
17 object with the label "gasket." Would you do
18 that for me?

19 ATTORNEY ROSATO: I'm going to object
20 to this. We're not creating new exhibits in
21 documents here.

22 Q. Despite counsel's objection, sir,
23 would you please mark it as I requested?

24 A. (Complies.)

1 Q. Okay. Now, you said earlier that
2 in Figure 5B, when the cap -- well, let's do
3 this: In the patent in front of you,
4 Exhibit 5B, would you label the cap as a
5 "cap"?

6 ATTORNEY ROSATO: I'm going to object.
7 I'm totally against creating new documents.
8 This is outside the scope. Completely
9 improper.

10 ATTORNEY HEINTZ: Counsel, there is
11 nothing improper about this. This is the '437
12 patent. The word "cap" is in the '437 patent.
13 He's testified to that. No, no more speaking
14 objections. This is ridiculous.

15 Q. Sir, would you please --

16 ATTORNEY ROSATO: You advanced a prior
17 art objection and you're trying to create new
18 documents to supplement your deficient prior
19 art case. It's completely improper.

20 ATTORNEY HEINTZ: Counsel, this is --
21 okay.

22 BY ATTORNEY HEINTZ:

23 Q. Sir, can you please mark the cap as
24 I've asked you to in Figure 5B.

1 A. (Complies.)

2 Q. Okay. Now, the black object that's
3 not a cap in Figure 5B, would that also be an
4 example of a gasket or would it be proper to
5 use the term "gasket" to refer to that object?

6 ATTORNEY ROSATO: Object to form and
7 foundation. Scope. We're trying to edit the
8 documents now.

9 A. I don't know what that is.

10 Q. Okay. Would it be fair to call it
11 a ring?

12 A. It's not that I don't know if it's
13 a gasket, ring, seal, I don't know what it is.
14 It could simply be discolored portion of the
15 bottle. I don't know what that is. It's not
16 described within the document I don't believe.
17 If it is -- cap certainly is, so I can label
18 cap. I don't know that gasket is described in
19 the document.

20 Q. Okay. You said that when the
21 cap --

22 A. I mean, it's not really the world's
23 greatest picture. It's kind of hard to --

24 Q. I agree. Nonetheless, it is the

1 disclosure of the patent. So you mentioned
2 earlier that you said that when the cap is
3 screwed onto the glass object, a seal will be
4 created; correct?

5 A. Correct.

6 Q. Where would the seal be?

7 A. Between the source container and
8 the cap.

9 Q. Where on the source container and
10 where on the cap will the seal be formed?

11 A. Wherever those two materials are in
12 direct contact.

13 Q. Which two materials?

14 A. The source container and the cap.

15 Q. Which portion of the source
16 container -- is the black portion of the
17 source container in contact with the cap when
18 it's screwed on?

19 ATTORNEY ROSATO: Object to form.

20 A. Once again, I don't know what that
21 is, sir.

22 Q. Regardless of what it is, the
23 question is: When the cap is screwed onto the
24 glass object, will the black portion of the

1 glass object result in a seal?

2 ATTORNEY ROSATO: Object to form.

3 Asked and answered.

4 A. It's possible.

5 Q. Does Figure 5B have a -- let me
6 strike that and start again.

7 Does the glass object in Figure 5B
8 have a volume, including a collector surface
9 with a seal?

10 A. No.

11 Q. Okay. If the cap is screwed onto
12 the glass object in Figure 5B, would there be
13 a volume, including a collector surface with a
14 seal?

15 ATTORNEY ROSATO: Object to form.

16 A. Most likely.

17 Q. Where would the seal be? Would it
18 be at the place where the threads of the black
19 cap engage the threads of the glass object?

20 ATTORNEY ROSATO: Objection. Form.

21 Asked and answered. We've already covered
22 this.

23 A. It would be at the top of where the
24 source collection vial contacts the cap.

1 Q. I'm sorry, did that complete your
2 answer or are you still thinking?

3 A. That completes my answer.

4 Q. Okay. All right.

5 I'd like you to take out what's
6 previously been marked as Exhibit 1003, which
7 is the Hassfjell-Hoff document that's right
8 there in your file.

9 A. All right.

10 ATTORNEY ROSATO: I actually have a
11 question. Remind me, is this Exhibit 1003 in
12 both cases? I think it is, right?

13 ATTORNEY HEINTZ: I believe so.

14 ATTORNEY ROSATO: Okay. Thank you.

15 ATTORNEY HEINTZ: All right.

16 BY ATTORNEY HEINTZ:

17 Q. Sir, I'll ask you to turn to
18 Figure 3 in Exhibit 1003.

19 Now, earlier, my colleague asked
20 you about how the embodiment shown in Figure 2
21 works.

22 Do you recall those questions?

23 A. I do.

24 Q. Okay. And for the sake of brevity,

1 I'm going to summarize it as basically saying
2 that in the embodiment in Figure 2, one
3 operates the toggle lever to retract the gate
4 valve, pushes down on the tube until the
5 filtering basket is located inside the
6 polyethylene bottle, and then at the end of
7 the process, the tube is retracted upwards
8 until it's in the position shown in Figure 2,
9 and the toggle lever is operated to close off
10 the gate valve.

11 Is that a fair summary of your
12 understanding of how Figure 2 works?

13 ATTORNEY ROSATO: Object to form.

14 Q. Sorry, Figure 2 works? Yes.

15 ATTORNEY ROSATO: Object to form and
16 that misstates testimony.

17 A. That's a -- that's the bullet
18 points.

19 Q. Okay. And is it your understanding
20 then that the embodiment shown in Figure 3
21 would work the same way?

22 A. That seems to be a reasonable
23 assumption.

24 Q. Okay. In Figure 3, what is the --

1 let me withdraw that.

2 In Figure 3, the gate valve bears a
3 label "VAT" on the side.

4 Do you see that?

5 A. I do not. Figure 3?

6 Q. Figure 3, yeah. If you look sort
7 of over here on the side of the housing, you
8 can see it.

9 A. Oh. That would seem to be correct.

10 Q. Okay. My only point here is this
11 gate valve is not just the black handle. It
12 includes that object, the portion of the
13 object, but the letters "VAT" on it; correct?

14 ATTORNEY ROSATO: Object to form.

15 A. I don't know what that object is,
16 but I'm assuming that encloses the gate valve
17 or holds the gate valve.

18 Q. Okay.

19 A. Do you have any -- you have the
20 Home Depot document. Do you have the VAT
21 document?

22 Q. It turns out I do.

23 A. Can I see it, please?

24 Q. Or something close to it anyway.

1 I'll find one.

2 THE WITNESS: I was looking for a label
3 too.

4 ATTORNEY HEINTZ: Okay. Let's mark as
5 Exhibit 8, Conroy Exhibit 8, a multipage
6 document bearing legend "VAT" across the top.

7 - - -

8 (Whereupon, multipage document
9 bearing legend "VAT" across the top, is
10 received and marked as Exhibit 8 for
11 identification.)

12 - - -

13 CERTIFIED STENOGRAPHER: Exhibit
14 Number 8.

15 THE WITNESS: Thank you, sir.

16 ATTORNEY HEINTZ: All right.

17 BY ATTORNEY HEINTZ:

18 Q. Sir --

19 ATTORNEY ROSATO: Just note my
20 objection. Form. Foundation. Authenticity.
21 Scope. Relevance, and I'll object to the
22 document -- any questions relating to it.

23 ATTORNEY HEINTZ: Okay.

24 Q. Sir, I will represent to you that I

1 went to the VAT website and pulled off an
2 example of a gate valve from that website, and
3 that's what's shown in Exhibit -- Conroy
4 Exhibit 8. That's my representation to you.
5 Okay?

6 I'll ask you to turn to the fourth
7 page of that document. Okay.

8 That illustration is labeled
9 "11.1HB, gate valve."

10 Do you see that?

11 A. I do.

12 Q. Okay. Do you have any reason to
13 doubt that this is an example of a gate valve?

14 ATTORNEY ROSATO: Objection. Form.
15 Foundation and scope.

16 A. I have no reason to object because
17 you said that it's clearly not the gate valve
18 in Figure 3.

19 Q. Is not the same exact gate valve,
20 but is it a gate valve of the same type of
21 what's shown in Hassfjell-Hoff figure --
22 Exhibit 3?

23 ATTORNEY ROSATO: Object to form.
24 Scope.

1 A. They look to be very dissimilar.

2 Q. Okay. How many gate valves of the
3 type shown in Figure 3 of Exhibit 1003 have
4 you personally seen in your professional
5 career?

6 ATTORNEY ROSATO: Object to form.

7 A. A handful.

8 Q. Okay. Is what's shown on the
9 fourth page of Exhibit Conroy 8 generally
10 representative of the gate valves that you've
11 seen in your professional career?

12 ATTORNEY ROSATO: Object to form and
13 note the standing objection I identified
14 earlier.

15 A. It seems to be a gate valve.

16 Q. Okay. Now, there is a gate shown
17 in what seems to be the gate valve of Conroy
18 Exhibit 8; correct?

19 ATTORNEY ROSATO: The same objections.

20 A. By that are you describing the
21 space in between the cylinder hole and the
22 movable object?

23 Q. I am specifically referring to the
24 movable object. Would it be fair to call that

1 a gate?

2 A. Yes.

3 Q. Okay.

4 ATTORNEY ROSATO: Objection.

5 Q. Would you please label the part we
6 just identified as a gate in Conroy Exhibit 8?

7 ATTORNEY ROSATO: You're asking him to
8 label the attorney instruction?

9 ATTORNEY HEINTZ: I'm asking --

10 ATTORNEY ROSATO: I'm going to object
11 to creating new documents at the behest of
12 opposing counsel.

13 BY ATTORNEY HEINTZ:

14 Q. So would you just mark what we
15 discussed as a gate with the letters G-A-T-E
16 in the figure?

17 A. I'm not technically sure which
18 portion is the gate and -- I mean, the entire
19 thing is a gate valve.

20 Q. Okay.

21 A. I'm not 100 percent sure we're
22 saying toggle the gate.

23 Q. You referred to a movable portion
24 in your response before; correct?

1 A. Uh-huh.

2 Q. Okay. Mark the movable portion
3 with the words "movable portion" if you'd
4 like.

5 ATTORNEY ROSATO: Objection. This is
6 completely improper. New document labeled
7 based on attorney instructions and basically
8 filtering attorney argument through --

9 ATTORNEY HEINTZ: Okay.

10 ATTORNEY ROSATO: -- the expert.

11 ATTORNEY HEINTZ: Mr. Rosato, the
12 speaking objections are improper and they need
13 to stop, and if they're not, we're going to
14 have to go talk to the Court, okay?

15 I don't want to do that, but the
16 speaking objections must stop. That's
17 improper. I'll show you a picture of the
18 trial guide if you'd like. It's improper.

19 ATTORNEY ROSATO: I'm noting my
20 objection.

21 ATTORNEY HEINTZ: And they're noted.
22 Okay.

23 BY ATTORNEY HEINTZ:

24 Q. So you marked the movable portion;

1 correct?

2 A. Correct.

3 Q. Okay. You see the upper most part
4 of the figure on that page that has what I
5 would refer to as a handle, and you've got a
6 line drawn to that. It says "movable
7 portion"?

8 A. It's also a movable portion.

9 Q. Okay. So let's label the -- do you
10 agree that moving the top portion will cause
11 the lower movable portion to move?

12 ATTORNEY ROSATO: Object to form.

13 A. I believe that would be how it's
14 designed.

15 Q. Okay. So can we label just the
16 lower part as the movable portion and the
17 upper part as the handle to keep it clear so
18 we avoid confusion?

19 ATTORNEY ROSATO: Object to form.

20 Okay.

21 Q. So we have a handle and we have a
22 movable portion; correct?

23 ATTORNEY ROSATO: Object to form.

24 A. I have labeled as you've

1 instructed.

2 Q. Fantastic.

3 When the gate valve is closed, the
4 movable portion will entirely close off the
5 bore going from left to right through the gate
6 valve; correct?

7 ATTORNEY ROSATO: Object to form.

8 A. No.

9 Q. When you close the gate valve, you
10 will be able to have material moving through
11 the bore of the gate valve from left to right?

12 A. Sorry, material moving, yes, from
13 left to right --

14 Q. Okay.

15 A. -- as illustrated.

16 Q. All right.

17 And likewise, when you open the
18 gate valve, meaning move the movable portion
19 to the highest position, material will be able
20 to flow through the bore going from left to
21 right in this -- in the gate valve; correct?

22 A. Where you --

23 ATTORNEY ROSATO: I'll object to form,
24 and I'll just restate my standing objection to

1 scope, as well as other concerns for this
2 document, the whole line of questioning.

3 A. Yeah, as soon as there is an
4 opening, yes, material can move.

5 Q. And if you look below the 11.1 HV
6 gate valve, you see that this gate valve is a
7 high vacuum isolation gate valve.

8 Do you see that?

9 ATTORNEY ROSATO: Object to form.

10 A. I see where it reads the standard
11 for high vacuum isolation.

12 Q. Okay. And the title is 11.1 HV
13 gate valve; right?

14 A. Yes.

15 Q. Okay. So I'm going to -- I'll
16 represent to you that this is a high vacuum
17 gate valve manufactured by VAT. You don't
18 have to accept it, but I'm just making a
19 representation to you that that's what you're
20 looking at.

21 So it's fair to say that when the
22 movable portion is in the closed position,
23 fluid, including gasses, cannot pass through
24 the bore from left to right in the gate valve

1 shown on Conroy Exhibit 8 that we're looking
2 at; right?

3 ATTORNEY ROSATO: Object to form.

4 A. Sorry, now you're asking me about
5 this gate valve or this gate valve?

6 Q. Conroy Exhibit 8.

7 A. Conroy Exhibit 8.

8 Q. The one in the -- the one that you
9 marked.

10 A. This one?

11 Q. Yeah, in other words, when the gate
12 is in the lower position or the movable object
13 is in the lower position, fluid communication
14 through the valve is cut off. When the
15 movable portion is in the upper position, then
16 fluid communication through the gate valve is
17 allowed?

18 ATTORNEY ROSATO: Object to form.

19 A. Yes, that would be the function of
20 a gate valve.

21 Q. Okay. Thank you.

22 Now, the gate valve in Conroy
23 Exhibit 8 has two cylindrical-shaped parts,
24 one on the left side of the gate valve and one

1 on the right side of the gate valve; right?

2 ATTORNEY ROSATO: Object to form.

3 A. Likely.

4 Q. Okay. So --

5 A. I can't see the other side of
6 the -- I can't see through the housing for the
7 gate valve or the gate itself.

8 Q. All right. On the left-hand side
9 of the gate valve in Conroy Exhibit 8, there
10 is a cylindrical portion; correct?

11 A. Yes.

12 Q. Can you just mark that as
13 "cylindrical portion" so we know what we're
14 referring to?

15 ATTORNEY ROSATO: I'm going to object
16 to this again. We're marking to know what the
17 lawyers are referring to when they ask you a
18 question.

19 A. I will draw whatever you'd like.

20 Q. Thank you.

21 A. So the spelling may not be the
22 best.

23 Q. I think you've got it correct, sir.

24 A. Okay.

1 Q. Okay. So there is a cylindrical
2 portion shown in the gate valve in Figure 8,
3 and my question to you is: Does there appear
4 to be a similar cylindrical portion shown in
5 Figure 3 of Exhibit 1003, the Hassfjell-Hoff
6 document?

7 ATTORNEY ROSATO: Object to form.

8 A. Potentially.

9 Q. Okay. Now, in the cylindrical
10 portion in Conroy Exhibit 8, there is an inner
11 surface that's sort of shinier than the larger
12 flat portion of the cylindrical portion.

13 Do you see that?

14 A. Sorry, where is that? Can you
15 repeat that?

16 Q. Yeah.

17 I'm looking at the cylindrical
18 portion in Conroy Exhibit 8 --

19 A. Okay.

20 Q. -- okay? There is an inner wall
21 that -- what appears to be shinier than the
22 flat part to the far left of the cylindrical
23 portion.

24 Do you see where I'm referring to?

1 A. I believe so.

2 Q. Okay. I'd like you to mark that,
3 that surface, as the inner surface of
4 cylindrical portion, and this is, again, just
5 to identify what it is we're talking about
6 when I ask you these questions, all right? So
7 inner surface, you can just mark it.

8 ATTORNEY ROSATO: I'm going to object.
9 This isn't even clear, but it's completely
10 improper for reasons noted.

11 A. So, I'm sorry, on the left or
12 right-hand side of the gate housing, which
13 would you like me to label as? This, my left,
14 the right, because there is two separate
15 rings. Which one would you like for me to
16 label as --

17 Q. I'm talking about that portion
18 right there.

19 A. Okay.

20 Q. Just mark that as the inner
21 surface.

22 A. I will write on here as instructed
23 --

24 Q. Thank you.

1 A. -- "Inner portion of surface."

2 Q. Cylinder?

3 A. "Inner portion of cylinder." Okay?

4 Q. Okay. Now, if the gate valve shown
5 in Conroy Exhibit 8 were to be substituted for
6 the gate valve shown in Hassfjell-Hoff
7 Exhibit 1003, Figure 3 --

8 A. Uh-huh.

9 Q. -- okay? Would what you just
10 marked as inner surface of cylindrical portion
11 be part of the inner volume of the generator?

12 ATTORNEY ROSATO: I'm sorry, we're now
13 making substitutions to prior art? Objection.
14 Outside the scope.

15 A. Would the inner portion --

16 Q. Of the cylinder.

17 A. Are you -- are you assuming that
18 the inner portion is -- if I were to replace
19 this in Picture 3, are you assuming that that
20 inner portion is pointing up in Figure 3 or
21 pointing down?

22 Q. Let's say it's pointing up.

23 A. Okay. So this points up. This is
24 up.

1 Q. And that one corresponds to the one
2 cylindrical portion you can see in
3 Exhibit 1003, Figure 3; right? You can see
4 one of those two cylindrical parts or one
5 cylindrical part you can see?

6 A. Okay.

7 ATTORNEY ROSATO: I'm still objecting.
8 This is getting ridiculous. I'm going to stop
9 this at some point and -- we're putting
10 together new combinations literally. If you
11 want to do this, you have a briefing
12 opportunity.

13 ATTORNEY HEINTZ: Let's stop.

14 Mr. Conroy, would you please leave the
15 room?

16 ATTORNEY ROSATO: Yeah.

17 ATTORNEY HEINTZ: It will just be a
18 moment, sir.

19 (The witness leaves the deposition
20 room.)

21 ATTORNEY ROSATO: You have a briefing
22 opportunity coming up. You can address new
23 argument there if you think it's appropriate.
24 It's clearly not.

1 ATTORNEY HEINTZ: Counsel --

2 ATTORNEY ROSATO: You're recombining
3 and reimagining new combinations that you're
4 building. Just do it at your briefing. If
5 you want to write labels on a new exhibit, as
6 you're instructing him to, you don't need a
7 witness to do that. You can have one of your
8 associates write labels on it. You can do it
9 yourself. I mean, if you want to make new
10 argument, label and create new documents.
11 We're wasting everybody's time sitting here
12 having -- instructing the witness to label new
13 documents as you instruct them to be labeled.

14 ATTORNEY HEINTZ: Are you done?

15 ATTORNEY ROSATO: Yeah. I'm objecting.

16 ATTORNEY HEINTZ: The speaking
17 objections need to stop now. There is nothing
18 inappropriate about new documents. New
19 documents are perfectly acceptable to use in
20 cross-examination. Your objections are
21 without foundation and frivolous.

22 You've stated your objection many
23 times. You say it's a standing objection. I
24 haven't taken any issue with it, yet you take

1 every opportunity to make five different
2 objections again and again. You need to stop.
3 You are wasting time in this deposition. Your
4 witness wants to get on a flight. I want to
5 get him there.

6 I'm almost at the end of this line of
7 questioning, but if you keep on this line and
8 keep interrupting and keep coaching this
9 witness, we're going to be talking to the
10 board. I don't want to have to do that. I
11 don't think you want to have to do that.

12 Let's get through this, and I think
13 you're going to see in a couple of minutes
14 there is nothing about some new prior art
15 objection that you're kind of imagining.
16 There is no new combination we're trying to
17 do, okay?

18 ATTORNEY ROSATO: Didn't you
19 specifically ask him about replacing the gate
20 valve in the Hassfjell-Hoff reference with the
21 different gate valve in this different
22 reference?

23 ATTORNEY HEINTZ: We're done. Are we
24 going to continue the deposition or not?

1 ATTORNEY ROSATO: Yes, let's continue
2 it. Thank you for noting the standing
3 objection. We'll maintain those and we'll
4 move to strike or reserve all objections.

5 ATTORNEY HEINTZ: You do whatever you
6 want to do.

7 ATTORNEY ROSATO: Okay.

8 ATTORNEY NALL: Come on back in.

9 (The witness reenters the deposition
10 room.)

11 BY ATTORNEY HEINTZ:

12 Q. Okay, sir.

13 We're going to pick up about where
14 we left off.

15 A. Okay.

16 Q. So looking, again, at Figure 3 of
17 Exhibit 1003, again, this is the
18 Hassfjell-Hoff reference; right? There is a
19 cylindrical portion that's visible I'd say at
20 the top of the body of the gate valve labeled
21 "VAT."

22 Do you see that?

23 A. I believe you're indicating this?

24 Q. Correct. Just so we're clear,

1 would you just label that as "cylindrical
2 portion"?

3 ATTORNEY ROSATO: Object to the form.

4 Q. Okay.

5 Now, we've established earlier that
6 in Figure 3, the filering basket in the tube
7 will both be passed down through the gate
8 valve and necessarily through what you've
9 marked as the cylindrical portion in Figure 3;
10 correct?

11 A. Potentially.

12 Q. How would it not be passed through
13 there --

14 A. Well, as soon as you open the gate,
15 by twisting the lever, open the gate, you
16 could push the tube down in there, which
17 arguably not much reason to do that as the gas
18 would emanate from the filering basket into
19 the collection pile at that time.

20 Q. Nonetheless, as Hassfjell-Hoff
21 describes his invention in Exhibit 1003,
22 you're going to push that tube in the filering
23 basket from a position where the filering
24 basket and the tube are entirely above the

1 gate valve, through the gate valve, until the
2 point where the filtering basket gets into the
3 polyethylene bottle; correct?

4 ATTORNEY ROSATO: Object to form.

5 A. Yes, as stated, when the tube is
6 lowered, the filtering basket with the
7 emanating barium sterate becomes positioned
8 inside the bottle.

9 Q. So when the generator in 1003 is
10 operated as described in 1003, the filtering
11 basket and the tube, or at least a portion of
12 the tube, will pass through the gate valve and
13 through that what you've labeled as
14 "cylinder"; right?

15 ATTORNEY ROSATO: Object to form.

16 Q. "Cylindrical portion." Excuse me.

17 A. Yes.

18 Q. Okay. And that for that to happen,
19 of course, the gate valve has got to be open;
20 correct?

21 A. That's correct.

22 Q. Okay. So when the gate valve is
23 open, there is a volume that exists on the
24 interior of the entire generator, including

1 the part above the gate valve and including
2 the part below the gate valve; correct?

3 ATTORNEY ROSATO: Object to form.

4 A. When the gate valve is open, there
5 is a volume that exists on the interior -- I'm
6 sorry. I should be reading that out loud.

7 ATTORNEY ROSATO: You're not
8 supposed --

9 ATTORNEY HEINTZ: That's fine.

10 ATTORNEY ROSATO: The instruction was
11 to ask the counsel to repeat if you don't
12 understand.

13 THE WITNESS: I'm sorry.

14 A. Can you repeat that for me?

15 BY ATTORNEY HEINTZ:

16 Q. Sure.

17 A. I wasn't trying to cheat.

18 Q. In Exhibit 1003, the generator has
19 a volume, an internal volume; correct?

20 A. Yes.

21 Q. Okay. And when the gate valve is
22 open, that internal volume extends from above
23 the gate valve, through the gate valve, and
24 below the gate valve, all the way into what's

1 been marked -- labeled in Figure 2 as the
2 collection lower chamber; right?

3 ATTORNEY ROSATO: Object to form.

4 A. When the gate valve is open, the
5 volume -- the two volumes become one, yes.

6 Q. Okay. Those volumes are defined by
7 the mechanical parts shown in Figure 3 of
8 Exhibit 1003; correct?

9 ATTORNEY ROSATO: Object to form.

10 A. Can you repeat that? I'm sorry.

11 Q. Sure.

12 That volume you just discussed --

13 A. Yes?

14 Q. -- is defined by the mechanical
15 components of what's shown in Figure 3 of
16 Exhibit 1003; correct?

17 ATTORNEY ROSATO: Object to form.

18 A. Yes, in the sense that when the
19 gate is closed, there is two separate volumes.
20 When the gate is open, there is one volume.

21 Q. Correct. So I'm just talking now
22 about the situation where the gate is open.
23 That one volume is defined by those mechanical
24 components as shown in Figure 3; correct?

1 ATTORNEY ROSATO: Object to form.

2 Asked and answered.

3 A. Correct.

4 Q. Okay. And those mechanical
5 components include the gate valve labeled the
6 "VAT"; correct?

7 A. Yes.

8 Q. Okay.

9 ATTORNEY ROSATO: Object to form.

10 Q. And I think you testified earlier
11 that there is not going to be any escape of
12 radioactive isotopes from the generator, even
13 when the gate valve is open; right? In other
14 words, we're not going to have radioisotopes
15 leaking out from the generator into the
16 atmosphere; correct?

17 A. You could remove through the vacuum
18 pump --

19 ATTORNEY ROSATO: Sorry. Let me get my
20 objections in.

21 Object to form and misstates.

22 Go ahead.

23 A. Can you repeat, please?

24 Q. Yeah. Let me do this an easier

1 way.

2 Let's take a look at Exhibit 1003
3 at what's marked in the lower right-hand side
4 as Page 7.

5 A. That's this side. Okay.

6 Q. Okay. You see the heading there
7 "Results"; do you not?

8 A. Yes.

9 Q. The last paragraph "Results" reads:
10 Despite the relatively strong 228 Thorium
11 source, no detectable leakage of any kind of
12 radioactivity out of the generator has been
13 observed.

14 Do you see that?

15 A. I do.

16 Q. Okay. So this volume that we
17 talked about that becomes one when the gate
18 valve is open, right, we're not going to have
19 radioactive isotopes leaking outside that
20 volume at least according to what Exhibit 1003
21 states on Page 7; right?

22 ATTORNEY ROSATO: Object to form.

23 Q. Sorry, I didn't hear your answer,
24 sir.

1 A. That is what the exhibit states.

2 Q. Okay. Now, the inside surface of
3 the cylindrical portion of Figure 3 is going
4 to be part of what defines that one volume we
5 talked about; correct?

6 ATTORNEY ROSATO: Object to form.

7 A. I'm sorry, can you be more clear on
8 what you're defining?

9 Q. Sure.

10 A. Inside --

11 Q. So we talked about a one volume
12 that's inside the generator when the gate
13 valve is in the open position. That's what
14 you mentioned earlier.

15 A. Uh-huh.

16 Q. Correct?

17 A. Uh-huh.

18 ATTORNEY ROSATO: Object to form.

19 Misstates.

20 Q. And that volume is defined by the
21 mechanical components shown in Figure 3;
22 correct?

23 ATTORNEY ROSATO: Object to form.

24 A. Potentially if the vacuum pump --

1 if everything is closed, if the valves are off
2 and nothing is escaping from the O-rings.

3 Q. Okay. And part of what defines
4 that volume is the inner surface of the
5 cylindrical portion at the top of the gate
6 valve in Figure 3; correct?

7 ATTORNEY ROSATO: Object to form.

8 A. The inner surface of the top of the
9 portion. The inner surface of the top of the
10 portion would be in contact with that volume.

11 Q. Well, let's try it this way: There
12 is a cylindrical object that you marked as --

13 A. Inner portion of cylinder.

14 Q. Okay. Inner portion of cylinder.

15 In Figure 3 in Exhibit 1003, if you
16 flip it over, you mark the cylinders, the
17 cylindrical object as what?

18 A. "Cylindrical portion."

19 Q. Cylindrical portion.

20 That cylindrical portion is going
21 to have an inner surface just like the inner
22 surface of the cylindrical portion you marked
23 in Figure 8; correct?

24 ATTORNEY ROSATO: Object to form.

1 A. Yes.

2 Q. Okay. Sorry, I said Figure 8. I
3 meant to say Exhibit 8. Okay, but the answer
4 is yes still, correct, with that correction?

5 ATTORNEY ROSATO: The same objection.

6 A. Yes.

7 Q. Okay. That inner surface is going
8 to define part of what you referred to as the
9 one volume of the generator earlier; correct?

10 ATTORNEY ROSATO: Object to form.

11 A. Yes.

12 Q. Okay. And assuming that what's
13 stated on Page 7 of Exhibit 1003, that there
14 is no detectable leakage of any kind of
15 radioactivity out of the generator, that means
16 that there's got to be a gas-tight seal
17 between the tube and the cylindrical portion;
18 correct?

19 ATTORNEY ROSATO: Object to form.

20 A. Well, that would not be correct.

21 Q. Okay. Why not?

22 A. Because there could be gas between
23 the tube and the inner surface of the
24 cylindrical portion.

1 Q. Okay. If one were to assume in
2 Figure 3 that the tube were actually in two
3 parts, one part above the gate valve and one
4 part below the gate valve, then there would
5 have to be a seal; correct?

6 ATTORNEY ROSATO: Object to form.

7 A. As represented, there is an O-ring.

8 Q. Correct, and as represented in
9 Figure 2 of Exhibit 1003, the tube is at least
10 two portions, one portion above the gate valve
11 and one portion below the gate valve; correct?

12 A. I do not know if this is -- I do
13 not know if Figure 3 shows the ready position
14 or the operating position.

15 Q. Well, that's fair enough, but
16 regardless of whether Figure 3 is in the ready
17 position or the operating position,
18 nonetheless, the tube that's above the gate
19 valve and the tube that's below the gate valve
20 are separate tubes if Figure 2 is
21 representative of what's in Figure 3; correct?

22 ATTORNEY ROSATO: Object to form.

23 A. Can you repeat that, please?

24 Q. Sure.

1 A. There is a lot of ifs in that
2 question.

3 Q. Regardless of whether Figure 3 is
4 in the ready position or the other position,
5 regardless of what position the gate valve is
6 in Figure 3 --

7 A. The gate valve or the tube?

8 Q. I'm talking about the gate valve.
9 Regardless of the position of the gate
10 valve --

11 A. Okay.

12 Q. -- in Figure 3, the portion of the
13 tube above the gate valve is separate from the
14 portion of the tube below the gate valve
15 assuming that Figure 2 is representative of
16 what's shown in Figure 3; correct?

17 ATTORNEY ROSATO: Object to form.

18 A. Sorry, one -- one more time,
19 please.

20 Q. Okay. Let's look at Figure 2 of
21 Exhibit 1003.

22 A. Okay.

23 Q. There is a tube that exists above
24 the gate valve; correct?

1 A. Yes.

2 Q. Okay. There is also a very short
3 portion of tube below the gate valve; correct?

4 A. I don't believe so.

5 Q. Okay. The tube of Figure 2 does
6 not extend through the gate valve; correct?

7 A. That is correct.

8 Q. Okay. And there is a seal --

9 A. That's contrary to what you just
10 said, that there was a portion above and
11 below. It would have to extend past it if
12 there was.

13 Q. Okay. So there is two separate
14 tubes in Figure 2; correct? A portion above
15 the gate valve and a portion below the gate
16 valve; correct?

17 ATTORNEY ROSATO: Object to form.

18 A. I don't believe so.

19 Q. Okay. The tube in Figure 1002
20 exists only above the gate valve; right?

21 ATTORNEY ROSATO: Object to form.

22 ATTORNEY HEINTZ: Sorry, I said that
23 wrong. Let me rephrase.

24 Q. The tube in Figure 2 of

1 Exhibit 1003 exists only above the gate valve;
2 correct?

3 A. That's correct.

4 Q. Okay. And assuming that the
5 embodiment in Figure 3 is represented by
6 what's shown in Figure 2, that would mean that
7 the tube in Figure 3 exists only above the
8 gate valve; correct?

9 A. Once again, I do not know if
10 Figure -- if Figure 3 is representative of
11 Figure 2 and Figures 2 -- 2's current
12 positioning, yes.

13 Q. Whether or not -- let me rephrase
14 that.

15 That's -- okay. In Figure 2, there
16 is something called a housing, housing upper
17 chamber dynamic, 44 millimeters.

18 Do you see that?

19 A. I do.

20 Q. Okay. That housing exists only
21 above the gate valve; correct?

22 A. That is correct.

23 Q. Okay. There is a housing shown in
24 Figure 3; correct?

1 A. There is nothing labeled in
2 Figure 3 that says "housing."

3 Q. Nonetheless, there is something
4 that corresponds to the housing shown in
5 Figure 2 and Figure 3; correct?

6 ATTORNEY ROSATO: Object to form.

7 A. Likely.

8 Q. Okay. Assuming Figure 2 is
9 representative of Figure 3, that housing would
10 not extend below the gate valve; correct?

11 A. That's correct.

12 Q. Okay. That must mean that there is
13 a seal between that housing and the
14 cylindrical portion of the gate valve;
15 correct?

16 ATTORNEY ROSATO: Object to form.

17 A. Can you repeat, please?

18 Q. That must mean that there is a seal
19 between the housing and the cylindrical
20 portion of the gate valve; correct?

21 ATTORNEY ROSATO: The same objection.

22 A. Define "a seal," please.

23 Q. The way it's used in the '437
24 patent.

1 ATTORNEY ROSATO: Object to form.

2 A. Are you asking if there is a seal
3 or are you asking if it is sealed?

4 Q. I'll ask both.

5 A. I do not know if there is a
6 physically present seal or sealing device. If
7 it's gas tight, I would presume there was a
8 seal produced.

9 Q. Okay. And that would mean that the
10 inner surface of the cylindrical portion would
11 define part of what you referred to as the one
12 volume of the generator when the gate valve is
13 in the open position; correct?

14 ATTORNEY ROSATO: Object to form.

15 A. Can you repeat one more time,
16 please?

17 Q. And that would mean that the inside
18 surface of the cylindrical portion would
19 define part of what you referred to as the one
20 volume of the generator when the gate valve is
21 in the open position; correct?

22 ATTORNEY ROSATO: Object to form.

23 A. The inside surface of the
24 cylindrical portion would be part of the one

1 volume -- I'm sorry, these are new
2 terminologies I'm just not used to. The
3 inside of the cylindrical portion --

4 Q. The inside surface of the
5 cylindrical portion --

6 A. Sorry, once again, this is all --
7 we're making up -- we're labeling things in a
8 new way that I want to make sure -- I want to
9 be specific and clear in my answer, so I want
10 to be sure that I understand what you're
11 speaking of, and I haven't had a chance to --
12 I feel like I'm putting together puzzle pieces
13 for you. So can you repeat one more time,
14 please?

15 Q. Sure.

16 A. Thank you.

17 Q. The inside surface of the
18 cylindrical portion --

19 A. So the inner portion of the
20 cylinder as labeled?

21 Q. Right.

22 A. Okay.

23 Q. Okay? Would define part of what
24 you referred to as the one volume of the

1 generator when the gate valve is in the open
2 position?

3 ATTORNEY ROSATO: Object to form.

4 A. The inside of the cylindrical
5 portion of the generator would create part
6 of -- sorry, one more time, please.

7 Q. The inside surface --

8 A. Sorry, these are all just new
9 terms. I'm trying to make sure I understand
10 what you're saying. Sorry to be frustrating.

11 Q. That's okay.

12 The inside surface of the
13 cylindrical portion would define part of what
14 you referred to as the one volume of the
15 generator when the gate valve is in the open
16 position?

17 A. That's correct.

18 ATTORNEY ROSATO: Object to form.

19 Q. Thank you.

20 A. Sorry.

21 ATTORNEY HEINTZ: I've lost track of
22 time. Are we due for a break?

23 ATTORNEY NALL: It's 2:54.

24 ATTORNEY HEINTZ: Do you need a break

1 or should we keep going?

2 THE WITNESS: I'm good, but I have a
3 hard stop of about 3:30 so --

4 ATTORNEY HEINTZ: Well, I'm not sure
5 we're going to make it, but we'll try.

6 BY ATTORNEY HEINTZ:

7 Q. Let's turn, again, to Figure 4 of
8 the '437 patent. All right, and I'll ask you
9 to take a look at your declaration again, and
10 again, this is for the '437 patent starting at
11 Page 9 where it reads "overview of the '437
12 patent."

13 A. Okay.

14 Q. Okay. Starting at Page 9 under the
15 heading "Overview of the '437 Patent," you
16 provide an overview of the '437 patent through
17 the end of Paragraph 27 at Page 13.

18 Is that a fair understanding of
19 what you're doing?

20 A. Yes.

21 Q. You only discuss Figure 4 in this
22 section labeled "Overview of the '437 Patent."
23 Does that mean that only Figure 4 is within
24 the scope of the claims of the '437 patent

1 from among the figures of the patent?

2 ATTORNEY ROSATO: Object to form.

3 A. No, I believe the other figures
4 would be in scope. I just -- was the portion
5 I decided to go more into depth on.

6 Q. All right.

7 So to be clear then, you're saying
8 that Figures 3 and Figure 5 are also within
9 the scope of at least Claims 1 and 16;
10 correct?

11 ATTORNEY ROSATO: Object to form.

12 - - -

13 (Clarification requested by the
14 stenographer.)

15 - - -

16 A. No, I'm just -- I think that's a
17 scoping issue for the -- I'd have to go back
18 and look at the patent real quick.

19 Sorry, can you ask me the question
20 again, please?

21 Q. Sure.

22 Are figures for the embodiments of
23 Figures 3 and 5 also within the scope of at
24 least Claims 1 and 16 of the '437 patent?

1 ATTORNEY ROSATO: Object to form.
2 Foundation.

3 A. I'm not an attorney, but I would
4 believe so.

5 Q. Okay. So let me direct your
6 attention to Claim 1 of the '437 patent.

7 A. I'm there.

8 Q. Okay. And I'm going to refer you
9 to the portion that reads, starting at Line 45
10 of Column 21: Wherein the solid precursor
11 isotope source is configured to be fluidly
12 coupled to a volume, including a collector
13 surface with a gas-tight seal.

14 Do you see that?

15 A. I do.

16 Q. Okay. When does Claim 1 require
17 that the gas-tight seal exists?

18 A. I don't know that there is a timing
19 element to this.

20 Q. Okay. Let's go to Claim 16. And
21 that's at Column 22, and I'm going to direct
22 your attention to Line 40, which reads:
23 Fluidly coupling a volume, including a
24 collector surface, to the solid precursor

1 isotope source using a gas-tight seal.

2 Do you see that?

3 A. Yes.

4 Q. When, if ever, does this method
5 claim of 16 require that this fluidly coupling
6 take place?

7 ATTORNEY ROSATO: Object to form.

8 A. There is no timing issue on 40.

9 Q. So if you only have the fluid
10 coupling while isotope collection is taking
11 place, would that satisfy the claim?

12 A. No. Have to be to a collection
13 surface with a gas-tight seal.

14 Q. Okay.

15 A. There is other elements to the
16 claim.

17 Q. Fair enough.

18 Will that element of the claim be
19 satisfied if the only time that the fluid
20 coupling exists is during the collection phase
21 of the operation of the generator?

22 A. The only time the operator -- I'm
23 sorry.

24 ATTORNEY ROSATO: Object to form.

1 A. Can you repeat that?

2 Q. Let me strike that and ask you a
3 different way.

4 A. Okay.

5 Q. Does Claim 16 require that the
6 fluid coupling be in place prior to exposing
7 the collector surface to the precursor isotope
8 source?

9 A. There is no timing element on
10 Line 40.

11 Q. So Claim 16 does not require that
12 the fluid coupling be in place prior to
13 exposing the collector surface to the
14 precursor isotope source?

15 ATTORNEY ROSATO: Object to form.
16 Misstates.

17 A. No, there is no element to timing.

18 Q. Sir, have you ever heard the phrase
19 "last night I shot an elephant in my pajamas"?

20 ATTORNEY ROSATO: Objection.
21 Foundation.

22 A. No, I've not.

23 Q. It is a famous example --

24 A. Not that famous.

1 Q. For those who are devotees of
2 grammar, it is a very famous example. Okay.

3 So if you heard the phrase "last
4 night I shot an elephant in my pajamas," what
5 portion of "in my pajamas" do you think is
6 being modified? Is it the shooter or the
7 elephant?

8 ATTORNEY ROSATO: Object to form,
9 foundation, and relevance.

10 A. I think that would be a poorly
11 worded sentence.

12 Q. Maybe, but what's your
13 understanding of who was in the pajamas? Was
14 it the speaker or was it the elephant?

15 A. I think the common assumption, I
16 mean, I think it's a very -- I would guess
17 that the writer is implying and the reader is
18 inferring that the person performing the
19 action of shooting the elephant was in
20 pajamas.

21 Q. And that's true even though "in my
22 pajamas" is closer to the elephant than it is
23 to I, the word "I" in that sentence; right?

24 A. I think plain language --

1 ATTORNEY ROSATO: Object to form.

2 A. I think that the particularness of
3 the English language is sometimes shameful,
4 and I think the claim language should be
5 well-defined. There is lots of things that
6 people misspeak of, but common -- common use
7 and phraseology I don't believe is what you're
8 trying to go for in a patent claim, correct?

9 Q. So I'm going to ask you my question
10 again.

11 A. Okay.

12 Q. So please try to answer it. You
13 told me that one would assume that who or what
14 was in the pajamas was the person doing the
15 shooting and not the elephant, and my question
16 was: That's true despite the fact that in my
17 pajamas is closer to the elephant than it is
18 to I; correct?

19 ATTORNEY ROSATO: Object to form.

20 A. Once again, that would be an
21 inference by the reader or an implication by
22 the writer, but that would likely have some
23 common standing.

24 Q. I don't know what that answer

1 means. I'm going to say --

2 A. I don't think it's a clear
3 question. I mean --

4 Q. My question, sir, is very simple.

5 A. Okay.

6 Q. You said that one would understand
7 that who is in the pajamas is the shooter and
8 not the elephant, and my only question is:
9 You say that despite the fact that pajamas is
10 closer to the word "elephant" than it is to
11 the word "I." Yes or no?

12 ATTORNEY ROSATO: Object to form.

13 A. Yes.

14 Q. Thank you.

15 Let's go to Paragraph 48 of your
16 declaration. Again, this is the '437
17 declaration in the 040 PGR. Paragraph 48 you
18 refer to collector surface. That's the second
19 to the last line at the end of Paragraph 48.

20 Do you see that?

21 A. Yes.

22 Q. Okay. So when you use the words
23 "collector surfaces" with respect to Figures 3
24 and 5 of the '437 patent, to which surfaces

1 are you referring?

2 A. The surfaces that are used to
3 collect the progeny isotopes.

4 Q. Would that be the inside surfaces
5 of the bottles shown in Figures 3 and 5?

6 A. I'm sorry, can you ask that one
7 more time?

8 Q. Sure.

9 Would that be the inside surfaces
10 of the bottles shown in Figures 3 and 5?

11 A. Yes.

12 Q. Would it be the outside surface?

13 A. No.

14 Q. And with respect to Embodiments 3
15 and 5, those inside surfaces are the claimed
16 collector surface that are referred to in
17 Claims 1 and 16; correct?

18 ATTORNEY ROSATO: Object to form.

19 A. Yes.

20 Q. Let's go back to Figure 4 of the
21 '437 patent. What is the purpose of the
22 O-ring in Figure 4 of the '437 patent?

23 A. It would be to keep gas from
24 escaping from the chamber.

1 Q. And to be clear, we're talking
2 about the chamber that's labeled "chamber with
3 gas-tight O-ring seal in Figure 4B"; correct?

4 A. Yes.

5 Q. Okay. When does the O-ring in
6 Figure 4 of the first -- sorry. Let me start
7 again.

8 Strike that question.

9 When does the O-ring in Figure 4 of
10 the '437 patent create a gas-tight seal?

11 A. It's there continuously.

12 Q. What is the purpose of the cap in
13 Figure 4 of the '437 patent?

14 A. That creates a gas-tight
15 collection -- gas-tight seal covering the
16 collection surface.

17 Q. What do you mean "covering the
18 collection surface"?

19 A. It's connected to the connection
20 surface and covers the area of the collection
21 surface.

22 Q. The collection surface is the
23 inside of the collector vial; correct?

24 A. That's correct.

1 Q. You're telling me that the cap in
2 Figure 4 is connected to the inside surface of
3 the collector vial at Figure 4?

4 A. I'm telling you it's connected to
5 the collector vial.

6 Q. It's connected to the outside
7 surface of the collector vial; right?

8 A. The top of the cap would be fluidly
9 coupled to the collector surface.

10 Q. The top of the cap would be
11 fluidly -- okay. Let's talk about where the
12 seal is. The cap creates a seal with the
13 collector vial somewhere; right?

14 A. That's correct.

15 Q. Does the cap create a seal with the
16 outside surface of the collector vial or the
17 inside surface of the collector vial?

18 A. The cap creates an airtight surface
19 for the collector vial that's connected to the
20 outside of the connector vial, but the top of
21 the gas tight cap covers the collection vial.

22 Q. Okay. So what you said was the cap
23 creates the airtight surface for the collector
24 vial that's connected to the outside of the

1 collector vial, and then you went on to say,
2 but the top of the gas cap covers the
3 collection vial. Was that accurate?

4 ATTORNEY ROSATO: Object to form.
5 Misstates.

6 A. The top -- the gas-tight cap
7 creates a gas-tight container with the
8 collection vial.

9 Q. And my question is: Where is the
10 seal formed between the cap and the collector
11 vial? Is it the outside surface of the
12 collector vial or the inside surface of the
13 collector vial?

14 ATTORNEY ROSATO: Objection to form.
15 Asked and answered.

16 Q. And I think you said it's the
17 outside surface. I just want to confirm I
18 understood your answer correctly.

19 ATTORNEY ROSATO: Object to form.
20 Misstates.

21 A. A portion of the gas-tight cap is
22 in direct connection with the top of the
23 collector vial and also the exterior -- the
24 interior of the cap is in -- is in direct

1 connection to the exterior of the collector
2 vial.

3 Q. How do you know that a portion of
4 the gas-tight cap is in direct connection with
5 the top of the collector vial?

6 ATTORNEY ROSATO: Object to form.

7 Q. Let me rephrase that.

8 Is the cap in portion with the
9 outside surface -- let me rephrase that again.

10 Is the cap in contact with the
11 outside portion of the top of the collector
12 vial or the inside portion of the top of the
13 collector vial?

14 ATTORNEY ROSATO: Object to form.

15 A. Can you read that back one more
16 time, please?

17 Q. Is the cap in contact with the
18 outside portion of the top of the collector
19 vial or the inside portion of the top of the
20 collector vial?

21 ATTORNEY ROSATO: The same objection.

22 A. I believe that would be outside.

23 Q. All right. Thank you.

24 Earlier, I was talking to you about

1 the O-ring in Figure 4, and that's the O-ring
2 that's part of the chamber with the gas-tight
3 O-ring seal.

4 Do you remember that?

5 A. I do.

6 Q. And you said that that O-ring
7 continuously creates a gas-tight seal;
8 correct?

9 A. That's correct.

10 Q. Is that true when the cap is
11 removed from the collector vial?

12 A. When a cap is removed from the
13 collector vial -- so can you ask -- can you
14 tell me your question again specifically?

15 Q. Is the O-ring forming a gas-tight
16 seal when the cap has been removed from the
17 collector vial?

18 A. If the material is in a -- is in
19 the closed position, the O-ring in conjunction
20 with the gas and liquid-tight valve would
21 create a gas-tight seal for the chamber,
22 collection vial would no longer be gas tight.

23 Q. Okay. And if the liquid-type valve
24 were opened?

1 A. The liquid-type valve were opened,
2 the O-rings would still keep gas from coming
3 up through the collection chamber.

4 Q. So it would still be forming a
5 gas-type seal?

6 ATTORNEY ROSATO: Object to form.

7 A. Yes.

8 Q. What is the purpose of the valve in
9 Figure 4 of the '437 patent?

10 A. Liquid-tight valve in the closed
11 position keeps the radiation coming from the
12 source material from reaching the collector
13 vial.

14 Q. And what's the importance of doing
15 that, if any?

16 A. That's the starting position, if
17 you will, where no radioactive material is
18 being collected in the collector vial.

19 Q. And it's also the ending position;
20 correct?

21 A. I believe so.

22 Q. Okay. And is it important that
23 that be a gas-tight seal when you're at the
24 end -- the end portion of the collection

1 process and you're removing the collector vial
2 from the cap?

3 A. I -- yes.

4 Q. Okay. And why is that important?

5 A. Because you're isolating the source
6 from the collector vial.

7 Q. Isn't it true that what you're
8 really doing is protecting a worker from
9 exposure to the source?

10 ATTORNEY ROSATO: Object to form.

11 A. Potentially.

12 Q. And that would be true if the
13 worker weren't fully outfitted in protective
14 clothing of some kind, right, and it would be
15 very important to have that valve make a
16 gas-tight seal so the worker would avoid
17 exposure to the source?

18 ATTORNEY ROSATO: Object to form.

19 A. You would not want the source
20 exposed, that's correct.

21 Q. And why wouldn't you want the
22 source exposed?

23 A. For contamination within the work
24 area, as well as work exposure.

1 Q. And what would happen if the worker
2 were exposed to the source?

3 A. They would receive radiation -- it
4 would depend on the amount of exposure they
5 received.

6 Q. Can that amount of exposure be
7 potentially harmful to a worker?

8 A. Any amount of radiation could be
9 potentially harmful.

10 Q. Would it be harmful to a worker
11 using the type of generators contemplated in
12 the '437 patent if that gas-tight seal were
13 not present?

14 ATTORNEY ROSATO: Object to form.
15 Foundation.

16 A. Pragmatically most of these are
17 done inside a few hoods with ventilation
18 equipment that pulls these gasses out so there
19 is no worker exposure.

20 Q. What if they were exposed to
21 Radon-220 gas, would that be harmful to a
22 worker?

23 A. Any amount of exposure to
24 radioactivity can be potentially harmful to

1 anyone.

2 Q. Okay. In Exhibit 1003, that's the
3 Hassfjell-Hoff patent we talked about earlier,
4 could you pull that back up?

5 Sorry, I said Hassfjell-Hoff
6 patent.

7 In Exhibit 1003, what happens to
8 the gas emanating from the source when the
9 source is pushed down as far as possible into
10 the container?

11 A. I don't know how far the container
12 can be pushed down.

13 Q. Let's say it's pushed down as far
14 as possible.

15 A. The gas would go into the lower
16 collection chamber, as well as outside on the
17 polyethylene bottle.

18 Q. So you're saying when the source is
19 pushed down as far as possible, and that would
20 mean that the tube is pushed down as far as
21 possible, that there is gas escaping from the
22 polyethylene bottle located in the lower
23 collection chamber; is that what you're
24 saying?

1 A. Likely.

2 Q. Why do you say it's likely?

3 A. Because there is -- there is
4 nothing that seals the filering basket and the
5 bottle.

6 Q. Does it say that somewhere in
7 Exhibit 1003?

8 A. No, that wouldn't be -- it would be
9 unwise to have those two things coupled.

10 Q. Why would that be?

11 A. Well, you're more likely to break
12 the top of the bottle off or create damage to
13 the filering basket or have what's inside the
14 filering basket contaminate the surface area
15 if you were to push it that far down. So
16 pragmatically, I don't think it would be wise
17 to push that down.

18 There is much more danger coming
19 from when you crack out these, these lids like
20 you show here crack very easily and it could
21 contaminate. So I think if you started
22 jamming the tube into there as far as you
23 could go, you'd likely create yourself a few
24 more problems than you'd solve.

1 Q. In the 1003 device, how long would
2 it take -- let me rephrase that.

3 Using the embodiment disclosed in
4 Exhibit 1003 as intended by the authors, how
5 long would the collection typically take?

6 A. Depends on the size of your source
7 and how much you're trying to collect.

8 Q. What would be a typical value a
9 person of ordinary skill in the art would
10 expect?

11 A. Again, it depends on what you're
12 trying to collect, what your -- what the
13 purpose of your collection would be.

14 Q. Would a 24-hour collection period
15 be typical?

16 ATTORNEY ROSATO: Object to form.
17 Asked and answered.

18 A. That certainly would be one time
19 frame you could use it in.

20 Q. Okay. How long would it take to
21 retract the gate valve and push the tube down
22 into the collection position?

23 A. I think it would depend on a few
24 factors, but if you have the vacuum pump open

1 and allow the gas to escape, it would be
2 quicker because there would be no resistance
3 from the gas being pushed down.

4 Probably a matter -- I really don't
5 know. I haven't used the device, so it would
6 be pure speculation, but it doesn't seem to
7 travel a long distance. I don't know what the
8 resistance is between the O-rings and the tube
9 or any of those factors, so I'm not sure.

10 Q. Okay. Would something like 30
11 seconds be a reasonable guess based on what
12 you do know from Exhibit 1003?

13 A. I think that would be reasonable.

14 Q. Okay. Same thing at the end when
15 you pull the tube up and close the gate valve,
16 that operation would take something like 30
17 seconds?

18 A. I don't know.

19 Q. Any reason to think it would be
20 different from the whole operation at the
21 start of the process?

22 A. I've never done it, so I would not
23 know. I don't have any reason to dispute you.

24 Q. Are polypropylene bottles -- sorry.

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1 Are polyethylene bottles likely to shatter as
2 glass?

3 A. In my experience not as likely, but
4 it does definitely occur.

5 Q. Okay.

6 ATTORNEY HEINTZ: We're going to go off
7 the record. I think I'm just about done.

8 CERTIFIED STENOGRAPHER: Off the
9 stenographic record at 3:25 p.m.

10 - - -

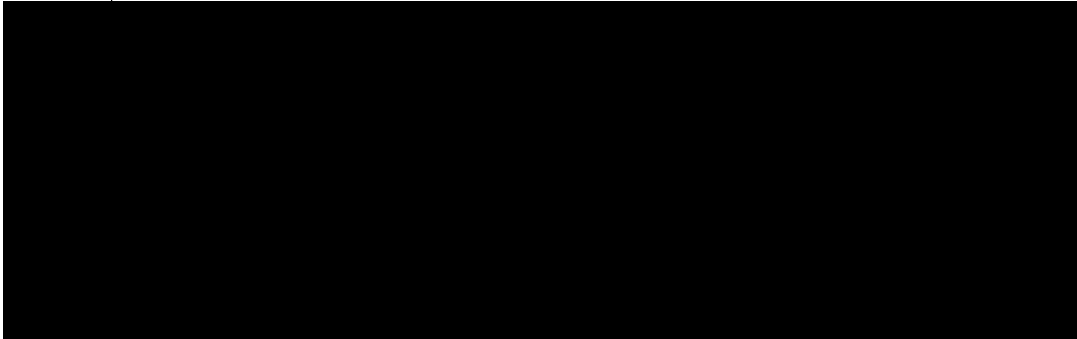
11 (Whereupon, a short recess was
12 taken.)

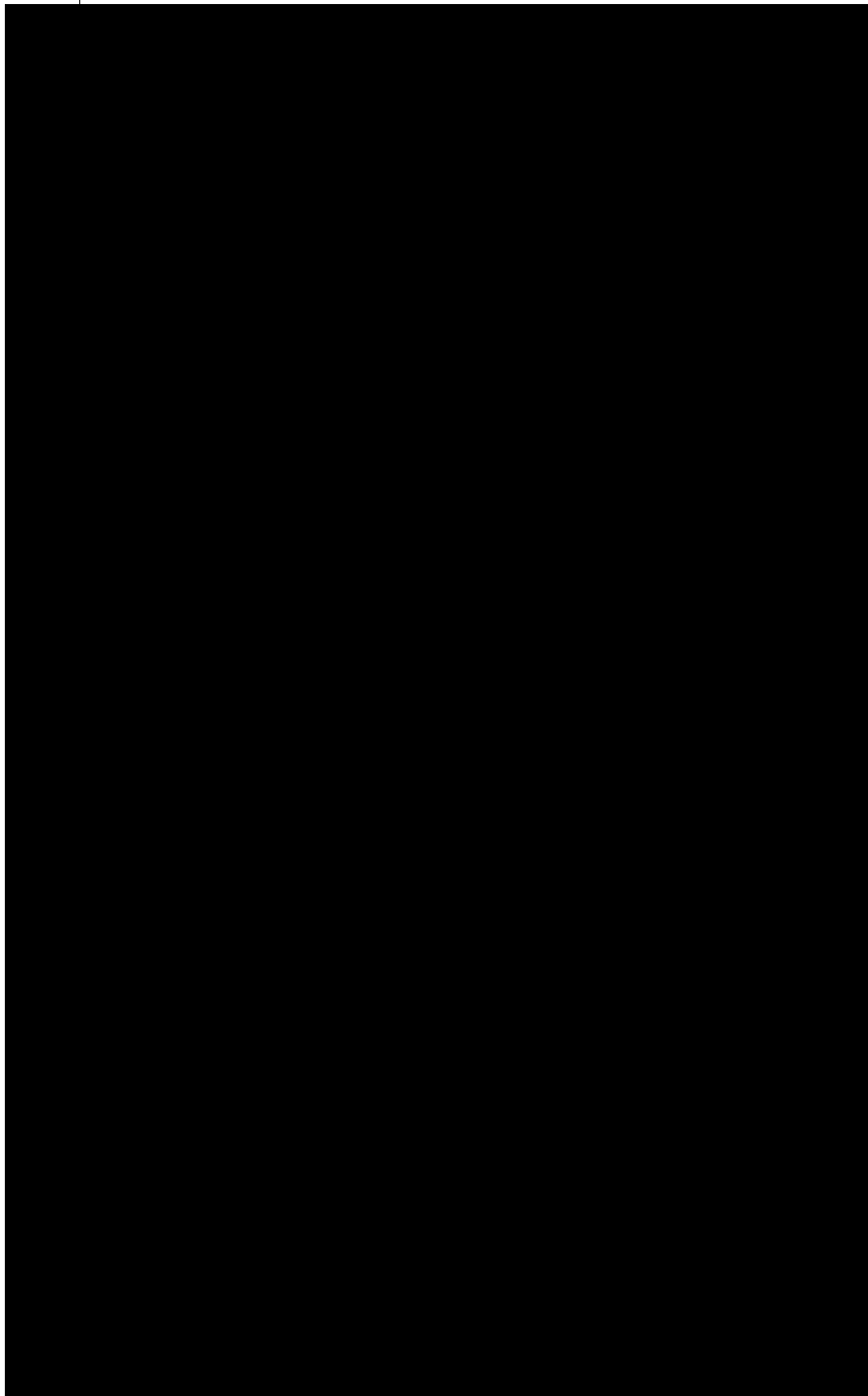
13 - - -

14 CERTIFIED STENOGRAPHER: Back on the
15 stenographic record at 3:31 p.m.

16 ATTORNEY HEINTZ: Okay. Let the record
17 reflect we're going to be on the confidential
18 record now for the next couple of questions.

19 BY ATTORNEY HEINTZ:





9 ATTORNEY HEINTZ: With that, no further
10 questions.

11 We can go off the confidential record,
12 and I'll pass the witness.

13 ATTORNEY ROSATO: We'll go off the
14 record.

15 Take a break.

16 CERTIFIED STENOGRAPHER: Off the
17 stenographic record 3:32 p.m.

18 - - -

19 (Whereupon, a short recess was
20 taken.)

21 - - -

22 CERTIFIED STENOGRAPHER: Back on the
23 stenographic record at 3:38 p.m.

24

1 EXAMINATION BY ATTORNEY ROSATO:

2 BY ATTORNEY ROSATO:

3 Q. Mr. Conroy, do you still have your
4 declaration from the '437 patent handy?

5 A. I do.

6 Q. Can you open that and turn to
7 Paragraph 28, please.

8 A. Sure.

9 Q. You were asked earlier today some
10 questions in reference to Paragraph 28.

11 Do you recall that?

12 A. I do.

13 Q. Okay. And Paragraph 28, what
14 section is listed here as containing
15 Paragraph 28?

16 A. It's --

17 ATTORNEY HEINTZ: Objection. Form.

18 A. It's regarding a level of skill in
19 the art and it's what I've been advised on
20 what legally defines a person of ordinary
21 skill in the art.

22 Q. Okay. So just to make sure we're
23 on the same page, we're looking at the
24 Section 5 level of skill in the art; correct?

1 A. Oh, yes, yes.

2 Q. Okay. And underneath that heading
3 is Paragraph 28?

4 A. Yes.

5 Q. Okay. And generally, what are you
6 communicating in Paragraph 28?

7 A. What I believe was relayed to me
8 from the attorneys is what a person of
9 ordinary skill in the art is defined to be.

10 Q. Defined according to the legal
11 standards?

12 A. Legal standards, correct.

13 ATTORNEY HEINTZ: Objection. Leading.
14 Objection. Form.

15 THE WITNESS: Sorry.

16 Q. Okay. And Section 5 also then
17 includes Paragraph 29.

18 Do you see that?

19 A. I do.

20 Q. What are you communicating in
21 Paragraph 28?

22 A. When Dr. Mirzadeh provided as a
23 description of a person of ordinary skill.

24 Q. Okay. And then the next paragraph

1 down is Paragraph 30; correct?

2 A. That's correct.

3 Q. And what are you communicating in
4 Paragraph 30?

5 A. That according to Dr. Mirzadeh's
6 standard in the description, that I'm at least
7 a person of ordinary skill in the art as of
8 the date he identifies.

9 Q. Are you communicating anything else
10 in that paragraph?

11 A. That that's based on my education,
12 knowledge, training, and experience, that I'm
13 familiar with the level and skill of
14 understanding of the POSITA at that date, and
15 that I'm familiar with the level and skill of
16 understanding of a POSITA, a person of
17 ordinary skill in the art, as of that date.
18 And in this declaration, I apply a level of
19 skill in the art consistent with the standard
20 by Dr. Mirzadeh.

21 Q. Okay. Did you understand -- I
22 recognize you're not a lawyer, but did you
23 understand the legal standard for a person of
24 ordinary skill in the art?

1 A. I did.

2 Q. And is that understanding
3 communicated in Paragraph 28?

4 A. It is.

5 Q. Okay. And did you understand
6 Dr. Mirzadeh as providing a definition of a
7 person of ordinary skill for this case?

8 A. Yes.

9 ATTORNEY HEINTZ: Objection. Leading.

10 Q. Okay. And where is that located?

11 A. Paragraph 29.

12 Q. Okay. And in Paragraph 30, you're
13 explaining that you qualified under his
14 definition; is that correct?

15 ATTORNEY HEINTZ: Objection. Form.
16 Objection. Leading.

17 A. Yes.

18 Q. When you provided your testimony in
19 this case, did you deviate from Dr. Mirzadeh's
20 definition of a person of ordinary skill?

21 A. I did not.

22 Q. Okay. Do you recall previously
23 being asked about, you know, various routine
24 tasks that a person of ordinary skill might

1 perform?

2 A. Yes.

3 Q. Did Dr. Mirzadeh lay out specific
4 routine tasks in his definition of a person of
5 ordinary skill?

6 A. He did not.

7 Q. Okay. I'll switch gears. Let's
8 look at the '437 patent. Let me know when you
9 locate that document.

10 A. I have it.

11 Q. Okay. Earlier today you had a
12 conversation about whether or not some figures
13 may be within the scope of the claims?

14 A. Correct.

15 Q. Do you recall that?

16 A. I do.

17 Q. In your declaration, were you
18 specifically asked to address each and every
19 figure and whether it's covered by the scope
20 of the claims?

21 A. I was.

22 Q. You were?

23 A. I was asked --

24 ATTORNEY HEINTZ: Objection. Form.

1 Objection. Leading.

2 THE WITNESS: Sorry.

3 A. I was asked if these figures -- if
4 they met the standards of the claim.

5 Q. You were asked that earlier today
6 in the deposition?

7 A. Yes.

8 Q. Okay. Can you look at Paragraph 50
9 of your declaration, please.

10 A. Yes, I'm there.

11 Q. So here you state: Because -- you
12 see the sentence: Because the plain and
13 ordinary meaning of Limitation 1C indicates
14 that with a gas-tight seal refers to a
15 collector surface, this integration is
16 consistent with the claim language?

17 A. I see that.

18 Q. Okay.

19 ATTORNEY HEINTZ: Objection. Form.
20 Objection. Leading.

21 ATTORNEY ROSATO: Okay.

22 Q. I just want to make sure we're
23 looking at the same page, so we're looking at
24 Paragraph 50; correct?

1 A. Yes.

2 Q. Okay. Is it your opinion that
3 Claim 1C requires a collector surface with a
4 gas-tight seal?

5 A. Yes.

6 Q. Okay. If you look at the patent
7 and look at Figure 5B, please.

8 A. Yes.

9 Q. Does Figure 5B illustrate a
10 collector surface with a gas-tight seal?

11 A. It does not.

12 Q. Okay.

13 ATTORNEY ROSATO: No further questions.

14 ATTORNEY HEINTZ: No further questions.

15 So you're done. I hope you make your
16 flight.

17 THE WITNESS: Thank you.

18 ATTORNEY ROSATO: Excellent.

19 (Continued on next page for jurat.)
20
21
22
23
24

CERTIFIED STENOGRAPHER: Off the
stenographic record at 3:45 p.m.

- - -

(Time noted: 3:45 p.m.)

- - -

CHARLES S. CONROY

Subscribed and sworn to before me
this ____ day of _____ 2026.

Notary Public
My Commission Expires:

/

/

1 I wish to make the following changes, for the
2 following reasons:

3 PAGE LINE

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5 REASON: _____

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C E R T I F I C A T E

I, RICHARD GERMOSEN, Fellow of the Academy of Professional Reporters, stenographic New Jersey Certified Court Reporter, New Jersey Certified Realtime Court Reporter, California Certified Shorthand Reporter, California Certified Realtime Reporter, NCRA Registered Diplomate Reporter, and NCRA Certified Realtime Reporter, do hereby certify:

That CHARLES S. CONROY, the witness whose deposition is hereinbefore set forth, having been duly sworn, and that such deposition is a true record of the testimony of said witness.

I further certify that I am not related to any of the parties to this action by blood or marriage, and that I am in no way interested in the outcome of this matter.

IN WITNESS WHEREOF, I have hereunto set my hand this 8th day of April 2026.



RICHARD GERMOSEN,
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